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SCREEN

INCORPORATING SCREEN EDUCATION

THE
TECHNOLOGICAL
RELATION



INTRODUCTION: THE TECHNOLOGICAL RELATION

When considering the series of discourses and institutions crystallised around the term 'technology', the first problem we must address is the uneven distribution of access to and control of various media technologies. This unevenness can be theorised globally as the concentration of power in what Paul Gilroy calls the overdeveloped nations¹ and locally as the appropriation of skills and control along class and gender lines.

The MacBride Report, a key document of the UNESCO *New World Information Order* policy in the 1980s, quotes 1977 figures that 'In most developed countries, the number of [television] sets approaches that of households. In the developing countries, however, only a small minority of households can afford a television set – in some 40 countries, only 10 per cent of household units have a receiver – and programmes are available chiefly in cities.' This situation has, if anything, deteriorated in the ensuing decade.² The concentration of exportable technologies in the developed world repeats itself in all branches of the leisure, cultural and information industries: hardware and software manufacture for export is largely controlled by a small number of multinationals based in the Northern hemisphere. The most significant development since MacBride is the industrial and economic growth of the Pacific Basin, especially in this context the increasing market dominance of Japanese hardware (despite the rising yen), the development of indigenous industries in the newly industrialising nations, particularly South Korea, and the internationalisation of Australian corporations headed by Alan Bond, Rupert Murdoch and Kerry Packer.

However, national politics continue to play a role; a proposed purchase by Fujitsu of the Fair-

child microchip firm was blocked by the US government in March 1987. During the following August the concern was sold to US-based National for a considerably smaller sum, in the process making National the third largest microchip firm in the United States behind Motorola and Texas Instruments.³ But such consolidation is still dependent on the labour of underdeveloped nations. Hundreds of thousands of young women are employed in 'offshore' assembly plants at wages varying 'from about 5% of the US norm in Indonesia to nearly 25% in Hong Kong'.⁴ Hispanic Americans and Filipino and Vietnamese immigrant workers are crucial within Silicon Valley itself. Yet the distribution of computers in underdeveloped nations is even more sluggish than that of TVs.

The world's software exporters – of TV programmes, recorded music, films, computer programmes – are even more notably concentrated in the industrial North. Even major Third World industries such as the Shanghai, Bombay and Hong Kong cinemas have extreme difficulty matching the global penetration of Hollywood and the

¹ Paul Gilroy, *There Ain't No Black in the Union Jack: The Cultural Politics of Race and Nation*, London, Hutchinson, 1987.

² *Many Voices, One World (The MacBride Report)*, Abridged Edition, London, UNESCO/Kogan Page, 1980, p 76. 1987 figures from *World Radio TV Handbook*, New York, Billboard Publications, 1987 edition, pp 574-5.

³ Martin Tran, 'Microchip Making Now in Fewer Hands', *The Guardian*, August 24, 1987.

⁴ Lenny Siegel, 'Microcomputing Does Little for the Third World', *Pacific Research* 10, 1979, quoted in Judith K Larsen and Everett M Rogers, *Silicon Valley Fever: Growth of High Technology Culture*, London, Unwin, 1984, p 194.

UK in software markets for broadcast distribution. Here, however, it is worth bearing in mind Dave Laing's observation on the dominance of Western musical forms in the recorded music markets of the world; 'while rock 'n roll was undoubtedly a moment in the expansion and technological development of the entertainment industry, it was also an instance of the use of foreign music by a generation as a means to distance themselves from a parental "national" culture.'⁵ The traffic in cultural uses which Laing singles out for attention needs to be stressed. It can offer the beginnings of an understanding of the growth of local uses of media technologies – Jamaican dub techniques are a familiar example – in which exported technologies are turned into the means for a new mode of cultural production at odds with the ideologies ostensibly 'essential' to the technology as such. Conversely, multinationals continue to close down indigenous production centres. Polygram, for example, promised to maintain Welsh-language production in a record pressing plant purchased in Wales in the late '70s. A few years later, European-wide rationalisation led to the closure of an important cultural resource.⁶

Cynthia Cockburn's trenchant observations of technological change and its gendered effects on workforces demonstrate the scale and mode of operation of women's exclusion from technical education and employment. In 1983 in the UK, she notes, girls of 16 'still had only 43.6 per cent of the passes in maths, 27.9 in physics, 27.3 per cent in the relatively new subject of computer studies, and 4.6 per cent in technical drawing. . . . The disadvantage is confirmed and deepened by 18 years of age. At A-level these percentages fall to 31.1, 21.0, 19.6 and 2.9 per cent respectively.'⁷ Other studies support these findings.⁸ The division of labour and consequent proletarianisation of the working class noted by Marx⁹ continues apace, and one of its contemporary avatars is the specifically capitalist exploitation of women and workers from underdeveloped nations. The removal of skills from workers and their installation into the fixed capital of the workplace in the form, for example, of robot programs, is an important aspect of this exploitation: it takes the form, as Paul Virilio notes, of 'a paradoxical *miniaturisation of action*, which others prefer to baptise *automation*'¹⁰.

Harry Braverman's analysis of these processes at

work in the office and retail trades is a case in point.¹¹ Managers in industry justify automation with redundancies, thus using the reserve army of labour to further depress wages. In the construction of information and media devices, this tendency is backed up by the threat to move production from overdeveloped to underdeveloped countries. Yet automation actually threatens even this mode of neo-colonialism, by lowering the need for any kind of labour. Such developments, despite the rhetoric of 'global villages' and international networks for information flow, widen the gap between rich and poor nations, and work to create technical elites within developing nations. Processes of design remain in the power centres, while manufacture continues to divide labour tasks into ever more minimal, and therefore more machine-manageable, elements.

It is now possible to purchase software which will automate the process of automation, a programme of calculations whose authors state that it 'avoids the need for information that has nothing to do with a department's cash-flow'¹². This bears out Marx's thesis that it is the factory *system* – not its individual items of machinery – which must be at the centre of analyses of technological change in

⁵ Dave Laing, 'The Music Industry and the "Cultural Imperialism" Thesis', *Media, Culture and Society*, vol 8 no 3, July 1986, p 338.

⁶ See Roger Wallis and Krister Malm, *Big Sounds from Small Peoples*, London, Constable, 1984.

⁷ Cynthia Cockburn, *Machinery of Dominance: Women, Men and Technical Know-How*, London, Pluto, 1985, p 18.

⁸ cf, for example, Cynthia Cockburn, *Brothers: Male Dominance and Technological Change*, London, Pluto, 1983; Lucy Moy-Thomas, 'TVEI' in *Media Education Initiatives* no 2, November 1985; Sherry Turkle, *The Second Self: Computers and the Human Spirit*, New York, Simon and Schuster, 1984. See also the critique by Pam Linn, 'Microcomputers in Education: Dead and Living Labour' in Tony Solomonides and Les Levidow (eds), *Compulsive Technology: Computers as Culture*, Free Association Books, London, 1985, pp 89-98.

⁹ Karl Marx, *Capital, Volume One*, London, Penguin/New Left Review, 1976, chapter 14, 'The Division of Labour and Manufacture', pp 455-499.

¹⁰ Paul Virilio, *Speed and Politics: An Essay on Dromology*, New York, Semiotext(e), 1986, p 140.

¹¹ Harry Braverman, *Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York, Monthly Review Press, 1974.

¹² Peter Primrose and Raymond Leonard, 'Automation Needs No Justification', *New Scientist* no 1576, September 3, 1987, p 62.

4 industries. But as with Laing's critique of the cultural imperialism thesis, we must remember that the specific nature of the technologies developed to perform these functions is itself a product of capitalist relations, and that these relations precede logically as well as historically the machinery in which they are fixed.

Technological determinist arguments concerning the effectivity of specific technological forms – print, moving image media, information technology – regardless of their discursive and institutional formations, are at odds with such an insistence on the priority of relations over the fixed forms in which they are embodied. Walter J Ong's work in particular has refocused attention on these theses. He is able to conclude his study of the impact of literacy thus:

*it is the oral word that first illuminates consciousness with articulate language, that first divides subject and predicate and then relates them to one another, and that ties human beings to one another in society. Writing introduces division and alienation, but a higher unity as well. It intensifies the sense of self and fosters more conscious interaction between persons. Writing is consciousness raising.*¹³

Like McLuhan before him, Ong gives to the technologies of writing, print and electronic word processing the status of historical agencies, able to effect psychic changes on a society-wide – or in McLuhan's case, planet-wide – level. This position ignores both the historical genesis of particular technologies¹⁴ and the issues raised above concerning the practices within which they are constituted, practices of control and expropriation.

Whether such arguments are optimistic, as in much industry discourse, or pessimistic, as in the work of Herbert Schiller¹⁵, they must take the phenomenal forms of the technologies as absolute givens, and cannot therefore offer explanations as to how people are able to use, manipulate or sabotage the technologies with which they come into contact. The development of such tactics is greatly helped by an understanding of the ways in which existing technological relations have come into existence. In particular, determinist theses tend towards teleological models of history, and in doing so risk blinding themselves to the multiplicity of specific histories and the complexity of specific moments. The film-historical articles in

this issue by Roy Armes, Ginette Vincendeau, Patricia Zimmermann and Peter Kramer, as well as Simon Frith's discussion of the development of home video, test in various ways models of ineluctable progress and the triumphal diffusion of its products. The uneven development of technologies within the overall institution of cinema, even its capacity to go backwards in the de-skilling of amateur production described by Zimmermann and the fallibility of the Hollywood corporations in the introduction of sound investigated by Vincendeau, indicate that heterogeneous histories of technology are neither monolithic nor monodirectional.

Such historicising approaches can inform the growing challenge to the Left, not merely to appropriate the necessary skills to utilise the new technologies, but to create new modes of working around them – a practice currently being undertaken by video-makers working in access, training and collective production worldwide. Beyond this lies the issue of designing technologies which actually embody these new working relations – rather than the top-down managerial structures currently designed into media and information technologies – as advocated in the '70s by the Lucas Aerospace Shop Stewards Combine and at present in the community computing coops linked through Poptel in the UK¹⁶.

What must precede any such work, however, is an understanding of the nature of the relations within which this thing technology is constituted. If we take a primitive definition – technology is the use of tools to effect a physical (and therefore also already cultural) change in the human environment – we are very little further forward. We have to think of the term 'technology' as a centrifugal net of interacting discourses, and a function of them: educational, legal, aesthetic, socio-

¹³ Walter J Ong SJ, *Orality and Literacy: The Technologising of the Word*, London, Methuen, 1982, pp 178-9.

¹⁴ See Lucien Febvre and Henri-Jean Martin, *The Coming of the Book: The Impact of Printing 1450-1800*, London, New Left Books, 1976.

¹⁵ For an example of optimism, see Anthony Hyman, *The Coming of the Chip*, London, New English Library, 1980. For a Left pessimist (or 'Luddite') position, see Herbert I Schiller, *Who Knows: Information in the Age of the Fortune 500*, New York, Ablex, 1981.

¹⁶ cf CSE Microelectronics Group, *Microelectronics: Capitalist Technology and the Working Class*, London, CSE Books, 1980; also *The Poptel Report*, London, Soft Solution, 1986.

cultural, managerial, scientific. It remains as fluid a concept, as unheld by any single discourse, as concepts such as class, gender and race.

Marx writes in the *Results of the Immediate Process of Production*:

*It is not just the objective conditions of the process of production that appear as its result. The same thing is true also of its specific social character. The social relations and therefore the social position of the agents of production in relation to each other, i.e. the relations of production, are themselves produced: they are also the constantly renewed result of the process.*¹⁷

It is a feature of capitalist relations of production that they must be reproduced within the process of production. Likewise technologies must be actively produced and reproduced as technologies both discursively and institutionally. A clear indicator of this lies in the education policy of the dominant faction in the contemporary Conservative Party, in which technology is fetishised as such within educational discourse, a focus for such terms as 'vocationalism', 'schooling for the real world', 'hands-on learning'. Just as surely it is fetishised through the hypostasis of science fiction, for example in William Gibson's and Kevin O'Donnell Jr's multinational dystopias of cyberspace¹⁸.

In each case, the issue of control is raised in terms of the relations between a 'real' world of machines and engines, about which there can be no doubts, and an unreal, unstable and fearful area marked out as the world of the psyche. This features in the current consultative document on schooling in the UK, in which art and physical education escape the strictures of testing, and are to be assessed only according to 'guidelines'¹⁹. While on the one hand a lingering gesture towards liberal education, this exception seems to me to mark a barrier between the technical subjects and skills which will be tested, and the 'body and soul' which remain beyond it. There is a great deal more work to be done in the area of relations between psyche and relations of production and reproduction first indicated by Metz²⁰, especially as they affect relations to media other than the cinema.

Psychoanalytic approaches to television, for example, have yet to move far beyond the confines of Lacanian analyses of cinema, as Sandy Flitterman-Lewis has recently suggested²¹. Yet the suggestiveness of work on the 'liveness' of television,

in particular Jane Feuer's work on segmented flow and David Morley's work on the distracted gaze²² seems to indicate an Imaginary relation with broadcast television which antedates the relation evoked in cinematic identification, into which Gillian Skirrow suggests Melanie Klein's work on infantile object relations might offer an entrance.²³ If such were the case, what other relations might be identified in the relation with video, a question which I have tried to address in my own contribution to this issue of *Screen*? Our familial and social relations are very much in play in the uses to which we bend media technologies, as are the vagaries through which they become elements of psychic life. Though apparatus theory seems to have fallen out of fashion, it must at least leave us with the conception of a relation, within which media technologies are constituted as such, which is simultaneously individual and collective, internal and external: a 'technological' relation which is both social and psychic.

Certain formations oscillate between the domains of internal and external, perhaps most curiously in the intensely self-absorbed activity in public spaces investigated by Leslie Haddon in this issue. There is a risk of anachronism in presuming that the masturbatory pleasures of electronic space war games or 'What the butler saw' machines on contemporary amusement centres in the UK can be read back into Edison's develop-

¹⁷ Karl Marx, op cit, p 1065.

¹⁸ William Gibson, *Neuromancer*, London, Grafton, 1986; *Count Zero*, London, Grafton, 1987; Kevin O'Donnell Jr, *Ora: Cle*, New York, Berkeley, 1984.

¹⁹ *National Curriculum 5-16: A Consultative Document*, London, Department of Education and Science/Welsh Office, July 1987, paragraph 24, p 10.

²⁰ Christian Metz, *Psychoanalysis and Cinema: The Imaginary Signifier*, London, Macmillan, 1977, especially p 7.

²¹ Sandy Flitterman-Lewis, 'Psychoanalysis, Film and Television' in Robert C Allen (ed), *Channels of Discourse: Television and Contemporary Criticism*, London, Methuen, 1987, pp 172-210.

²² Jane Feuer, 'The Concept of Live Television: Ontology as Ideology' in E Ann Kaplan (ed), *Regarding Television*, American Film Institute Monographs vol 2, Frederick MD, University Publications of America, 1983, pp 12-22; David Morley, *Family Television: Cultural Power and Domestic Leisure*, London, Comedia, 1987, especially chapter 2.

²³ Gillian Skirrow, 'Hellivision: an Analysis of Video Games' in Colin McCabe (ed), *High Theory/Low Culture: Analysing Popular Television and Film*, Manchester, Manchester University Press, 1986, pp 115-142.

6 ment of the individually used Kinetoscope in 1896. Yet the strange dialectic of private pleasures in public places, the internal and the external, seems more dramatic in the arcade than the cinema, especially as cinema goes to such lengths to remove the spectator from the realm of the visible. Copyright, which I take to be central to the politics of contemporary culture, might appear to be entirely external. Its centrality to the developing conflict between hardware and software manufacturers – notoriously over the issue of digital recording tape-cassette players – and to state control, as well as ‘intellectual property’ controls over the free play of signifiers²⁴ cannot be denied. But also at stake is the intensely personal appropriation of auditory and visual signifiers as elements of our own audio-visual vocabularies. Bill Nichols’ piece in the last issue of *Screen* suggested that new communications technologies also effect the subjective relations into which they are inserted. Both his essay and John Frow’s in the same issue outlined the ways in which new distribution and reproduction technologies pose threats to the established legal doctrines of intellectual property, confirming the suspicion that capital is once again entering a phase of intense internal contradiction.

The relation between the Strategic Defense Initiative and the craze for arcade video games noted by Nichols and pursued in this issue by Leslie Haddon seems to bear this out: the rapidity and scale of information processing is such that it must be handed over to machines – decision making is left to the gadgets. Yet the gadgets are not only fixed forms of dead labour, but also preserve and reproduce the relations of production within which they have been formed. As Virilio points out²⁵, the necessary speed with which military decisions must be made means that there can be no decisions as such, only the lightning response of machine to machine. The whole (political) point of having a war is gone. What remains, as Skirrow argues²⁶, is war as a *mise-en-scène* for the playing out of internal fantasies.

At the same time, the lag between hard and software development suggests the unevenness of this automation. In an unpublished essay, Steve Brockbank concludes that only after over forty years of development has software design begun to be perceived as sharing the centrality of the building of computers²⁷. Satellite broadcasting is

far from reaching this stage: the European Space Agency system *Olympus* will cost in excess of £200 million to set in functioning orbit, yet although the specific brief is for the development of interactive programming, the amount set aside for software development is a mere £200 thousand, 0.1 per cent of the budget. Other satellite systems are unlikely to originate or commission new programmes, looking instead to the reinvigorated Hollywood analysed here by Douglas Gomery. New recording and distribution systems, such as compact disc, DAT and tubeless video cameras can scarcely be said to have brought new areas of software to the marketplace. Electronic publishing has failed either to provide new forms of material or even to distract authors from the kudos of publishing their work in traditional print media.

Similar contradictions are created by the move to deregulate broadcasting. The technical opportunities for multiplying input and increasing ‘consumer choice’ tend to be opposed by the consolidation of media capitals, a point which Douglas Gomery notes here in regard to Hollywood’s return to vertical integration. In the United States, both Rupert Murdoch and the leftwing Deep Dish project can exploit the technical opportunities of satellite broadcasting, although the latter’s access to even a cheapened system is relatively miniscule. In the UK, the incipient move to deregulation (with commercial television franchises to be awarded entirely according to bid rather than to ‘quality’) has been accompanied by government fears of an unregulated rash of sex, violence and radical polemic. The outcome may be the homogenisation of UK broadcasting by a paradoxical combination of private monopolies and state censorship. Will this eventuality lead audiences to conclude that ‘their’ media no longer speak to or for them? As John Roberts’ report in this issue suggests, such a conclusion has encouraged Sinn Féin to produce their own videos in order to

²⁴ John Dovey, ‘Copyright as Censorship: Notes on “Death Valley Days”’ in *Screen*, March–April 1986, vol 27 no 2, pp 52–5.

²⁵ Paul Virilio, *op cit*, pp 139–40.

²⁶ Gillian Skirrow, *op cit*, pp 129–138.

²⁷ Steve Brockbank, *Programming Languages: Structured Design and Speed. A Study of a Technological Field*, Politechnic of Central London, 1987.

operate in the heavily censored arena of Irish politics.

But while new technologies are opened up for local uses, the interests who appropriate them often feel constrained to reproduce the patterns of textual production which the medium seems to demand.²⁸ The 'technological' relation is deeply embedded, not simply as peer pressure, but as something far more deeply entrenched. Class and gender relations re-emerge as professionalism and as reformist politics, but also as the tyranny of 'good taste', a thoroughly internalised relation to the cultural production of oppressed groups

²⁸ cf Ien Ang, 'The Vicissitudes of "Progressive Television"', *New Formations*, no 2, Summer 1987, pp 91-106.

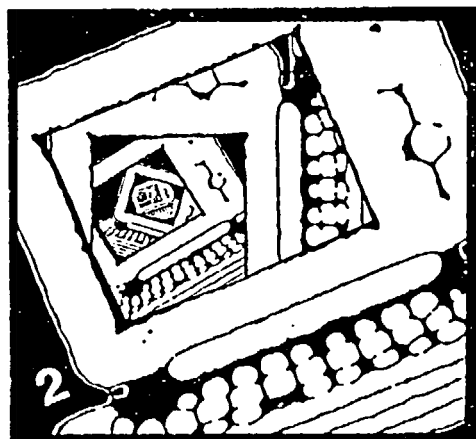
²⁹ See my 'Anxiety in Public Houses: for a Semiotics of Design Consciousness' in *Design History Journal* no 3, 1988 (forthcoming).

which either dismisses them or, more recently, permits a (postmodern?) enjoyment of them as kitsch, effectively a 'neo-colonialist' relation.²⁹ Struggles in technology demand personal politics as well as institutional.

Finally, it is sad to report the deaths of two scholars who have contributed enormously not only to the general development of media and cultural studies, but particularly to the technological issues addressed in this issue of *Screen*. Raymond Williams' pioneering studies of many media underlie the contributions here, just as his work remains an inspiration in the development of any cultural politics. Gillian Skirrow's contribution to the development of television studies was matched only by her commitment to women's employment in the media industries. As friends as well as colleagues, both will be greatly missed.

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ENTENDRE, C'EST COMPRENDRE: IN DEFENCE OF SOUND REPRODUCTION

BY ROY ARMES

¹ Martin Jay, 'In the Empire of the Gaze: Foucault and the Denigration of Vision in Twentieth-Century Thought', *ICA Documents 4: Postmodernism*, London, ICA, 1986, p 19.

² *ibid*, pp 19-20.

Nothing essential happens in the absence of sound

– Jacques Attali

IN HIS MASTERLY account of Michel Foucault contained in the recent *ICA Documents on Postmodernism*, Martin Jay locates the writer in the context of a marked polarity within French thought. Jay acknowledges the special role accorded to vision in Western epistemology since the Greeks:

*With the rise of modern science, the Gutenberg revolution in printing and the Albertian emphasis on perspective in painting, vision was given an especially powerful role in the modern era. In France in particular, the domination of visual experience and the discourse of sight seems to have been especially strong.*¹

Against this Jay sets what he calls the anti-visual discourse of twentieth century French thought, 'the interrogation of sight carried out by a wide and otherwise disparate number of French intellectuals':

*If the French obsession with vision has continued unabated to our own day, it has, however, taken a very different turn from its earlier direction. Beginning with Bergson's critique of the spatialization of time, the French interrogation of sight has tended increasingly to emphasize its more problematic implications.*²

The ambivalence with regard to vision which Jay traces in Foucault's thought can be found too in the work of many of his contemporaries. A particularly revealing example is Alain Robbe-Grillet, who began publishing novels in the 1950s and turned to film-making in the early '60s. From the beginning of his career, Robbe-Grillet, who is an articulate populariser of his own work rather than a rigorous theorist, was seen as a leader of the so-called 'new novel', hailed as an exemplar of objective writing, a *chosiste* and founder of an *école du regard*. But within a bewilderingly short time, evaluation shifted totally, and Robbe-Grillet found his work reinterpreted as a form of subjective realism, which recorded not the external world but the inner obsessions of the unseen narrator-hero. Robbe-Grillet, whose relation with his critics has always been complex, was able successively to go along with – and contribute publicly to – each of these interpretations. But from the start his own private concern was far removed from any kind of *école du regard*:

*At the very moment when I was fervently praising optical description, the only passages of Jealousy which really interested me were the acoustic passages about which I never spoke at the time. All those sounds which were heard. And they interested me simply because they had not been conquered by meaning.*³

When Robbe-Grillet turned to the cinema, what interested him, therefore, was not so much the camera's ostensible objectivity, or even the image track itself, but rather

*the sound track – voices, noises, different effects, different kinds of music – and above all, the possibility of playing on two senses at the same time, the eye and the ear.*⁴

Robbe-Grillet's progression as a film-maker – from the script of Alain Resnais's *Last Year at Marienbad* in 1961 through seven features as a director up to *La Belle Captive* in the mid-1980s – is controversial. But its mixture of narrative innovation, painterly allusion and play with sound is very characteristic of that area of contemporary French culture in which Martin Jay locates Foucault: part celebration of the image, part questioning of it. However Robbe-Grillet's work is to be interpreted, it demands an awareness that film is not only an audio-visual medium, but also one in which the visual need not necessarily play the dominant part.⁵

Tom Levin has demonstrated with admirable clarity that the traditional approach of film theorists has been to deny any distinction between a sound in real life and its representation in a film – in Levin's words, the stance has been to 'equate the recorded data of the cinema soundtrack with the "original" sound'.⁶ Oddly enough, though film theory was influenced in important ways in the 1970s by a number of thinkers and theorists named by Jay as having – like Foucault and Robbe-Grillet – called into question the time-honoured nobility of

³ cit, Jean Ricardou (ed), *Colloque Robbe-Grillet: Analyse, Théorie*, Paris, Union Générale d'Éditions, 1976, p 37.

⁴ Alain Robbe-Grillet, 'Time and Description in Contemporary Narrative', in *Snapshots and Towards a New Novel*, London, Calder and Boyars, 1965, p 146.

⁵ For Robbe-Grillet's film work see my own *The Films of Alain Robbe-Grillet*, Amsterdam, John Benjamins BV, 1981, and two works by André Gardies, *Approche du Récit Filmique*, Paris, Albatros, 1980 and *Le Cinéma de Robbe-Grillet: Essai Sémio-critique*, Paris, Albatros, 1983.

⁶ Tom Levin, 'The Acoustic Dimension', *Screen*, May-June 1984, vol 25 no 3, p 56.

⁷ Martin Jay, op cit, p 20, lists Bataille, Sartre, Metz, Irigaray, Althusser, Levinas and Merleau-Ponty.

⁸ Jean-Louis Comolli, the series of articles published in six issues of *Cahiers du Cinéma* between May-June 1971 and September-October 1972 still only partially published in English: 'Technique and Ideology: Camera, Perspective and Depth of Field', Part One, *Film Reader*, no 2, 1977, Parts Three and Four, Philip Rosen (ed), *Narrative, Apparatus, Ideology*, New York, Columbia University Press, 1986.

⁹ Christian Metz, *Film Language*, New York, Oxford University Press, 1974, pp 108-182.

¹⁰ Rick Altman, 'Introduction', *Yale French Studies*, no 60, special issue: 'Cinema/Sound', p 3.

¹¹ See also Teresa de Lauretis and Stephen Heath (eds), *The Cinematic Apparatus*, London, Macmillan, 1980; *Screen*, May-June 1984, vol 25 no 3, 'On the Soundtrack'; Elisabeth Weis and John Belton, *Film Sound: Theory and Practice*, New York, Columbia University Press, 1985; and *Iris*, vol 3 no 1, 1985, 'La Parole au Cinéma/ Speech in Film'. Of considerable interest too are two volumes by Michel Chion unfortunately not as yet translated into

sight'⁷, virtually all writing on the technological history of cinema continues to reflect the old cliché of the supposed visual bias of our Western culture, in which seeing is believing, an eyewitness is credible, but hearsay evidence is unacceptable. The pattern was set by two of the founding fathers of 1970s film theory: Jean-Louis Comolli, who focused exclusively on the camera in his stimulating investigation of cinema and ideology⁸, and Christian Metz, who devised a 'general table of the large syntagmatic category of the image-track', while ignoring totally the parallel soundtrack – even though the chosen example was Jacques Rozier's *Adieu Philippine*, in which the new balance of sound and image brought about by *cinéma vérité* finds striking expression.⁹



Adieu Philippine (1962): its new balance of sound and image was ignored by Metz's visual syntagmatic.

Since Rick Altman opened his introduction to the 1980 edition of *Yale French Studies* on 'Cinema/Sound' with the observation that 'more than half a century after the coming of sound, film criticism and theory remain resolutely image-bound'¹⁰, many valuable pieces of sound analysis have been published and anthologised.¹¹ But the received view of cinema's technological history remains that encapsulated in Steve Neale's recent BFI publication, *Cinema and Technology*: the 'cinematic apparatus' is invented in the 1890s and sound enters the picture only in the 1920s, is significant then, but has no subsequent consequence or history.¹² The present article sets out to refute this view, not by proposing any new or little-known facts, but by taking a different starting point.¹³ If we start out from video, seeing the video cassette recording,

not the film projector, as 'the crucial device' in the current expansion of media entertainment¹⁴, then it is possible to construct an alternative pattern of technological history. Rather than simply assuming that seeing is believing, I should like to draw on the French questioning of the image and take my keynote from the words with which Jacques Attali opens his contribution to the debate, *Noise: The Political Economy of Music*:

*For twenty-five centuries, Western knowledge has tried to look upon the world. It has failed to understand that the world is not for the beholding. It is for hearing. It is not legible, but audible.*¹⁵

I

The argument proposed here sets out to accomplish three specific reversals of conventional wisdom about film technology: first to show that in the history of sound and image reproduction, sound has seldom, if ever, been the junior partner; secondly, to demonstrate that far from being the central system for the organisation of images and sounds against which television and video must be measured, the feature film is in many ways an 'aberration' (its particularity being in no way lessened by its fruitfulness as a means of artistic expression); and thirdly, to query the commonsense view, expressed by Stephen Heath among others, that

*the sound track is hierarchically subservient to the image track and its pivot is the voice as the present of character in frame, a supplement to the dramatization of space, along with accompanying 'sound effects'.*¹⁶

Crucial to this argument is the refutation of the assumption that the cinema was 'invented', once and for all, in the 1890s. The views put forward here are based on the premise that, in technological as well as artistic terms, cinema has been constantly and continuously *reinvented* throughout its history.

If we consider the overall pattern of sound/image reproduction over the past 150 years – of which film forms only one (increasingly less important) part – it is clear that we have to look at two forms of reproduction: not just recording but also transmission. From this perspective, the technological change and development has a complete logic, comprising three clearly distinguishable if overlapping stages. First, there is the burst of nineteenth century invention which resulted in the emergence of three new media of recording – the still photograph, the gramophone record and the film – as well as key initial work on sound transmission, on wireless and on tape recording. Then, in the 1920s, comes the electronic revolution which gave rise to the two forms of (initially live) broadcasting, radio and television, and transformed both the film and record industries. Finally, there is the new and largely ignored third

English: *La Voix au Cinéma*, Paris, Cahiers du Cinéma, 1982, and *Le Son au Cinéma*, Paris, Cahiers du Cinéma/Éditions de l'Etoile, 1985.

¹² Steve Neale, *Cinema and Technology: Image, Sound, Colour*, London, British Film Institute and Macmillan, 1985.

¹³ The present article stems from my own struggles to come to grips with video in a forthcoming book, *On Video*, London and New York, Routledge, due Spring 1988.

¹⁴ Brian Winston, *Misunderstanding Media*, London, Routledge and Kegan Paul, 1986, p 2. This is easily our most exhaustive account of the development of communication and information technologies.

¹⁵ Jacques Attali, *Noise: The Political Economy of Music*, Manchester, Manchester University Press, 1985, p 3.

¹⁶ Stephen Heath, 'Narrative Space', *Screen* Autumn 1976, vol 17 no 3, p 100.

¹⁷ Peter Wollen, 'Cinema and Technology: A Historical Overview', in *Readings and Writings*, London, Verso, pp 170-171.

phase inaugurated after World War II by the development of electromagnetic tape recording of sound and image.

Still photography, which can be dated from August 19, 1839, when details of the daguerreotype process were made public in Paris, has a special place in the history of the communication media as the first system of *recording* to be perfected. But fifty years were to pass before it took the form which made it the immediate precursor of cinema. As Peter Wollen has observed, the prerequisite for cinema is the combination of celluloid base and photographic emulsion¹⁷, and it was not until 1889 that Eastman began to market celluloid roll film, thereby opening the way for moving pictures to be developed within half a dozen years. During the fifty year period in which still photography developed from a cumbersome and expensive process for professionals and rich amateurs to an easy-to-handle mass market leisure form, there was a parallel development in sound *transmission*, in which the key dates are Samuel Morse's demonstration of the electric telegraph in 1844, Alexander Graham Bell's telephone patent of 1876 and Guglielmo Marconi's London patent for his wireless transmission system in 1896. Obviously, if we define cinema as an essentially visual medium which was fully invented in the 1890s, then these developments in transmission can be disregarded. But if we look at cinema's overall development, it is apparent that the commercialisation of sound transmission was indeed crucial, since it was the huge electrical companies grown rich on the profits from the telephone and radio which, in the 1920s, had the capital and motivation necessary to ensure the transformation of cinema into the image-and-sound medium which most of the film pioneers had sought to create.

When we move on to the recording of *moving* pictures and of sounds, the pattern of sound anteriority is immediately and unambiguously established. In the case of the development of scientific tools to analyse sound and movement (which, by definition, did not seek to replay them in mimicry of real life), Léon Scott de Martinville's *phonautograph* of 1857, a device which made permanent visual records of sound vibrations, precedes by far the 1880s experiments of Etienne Marey with his 'photographic gun' and Eadweard Muybridge with his multi-camera systems for studying human and animal locomotion. Viable systems for recording *and* replaying sound were devised independently in 1877 by Thomas Edison and the Frenchman Charles Cros (though the latter was unable to obtain financial backing). A first - admittedly toylike - cylinder-style *phonograph* was marketed by Edison in 1878 and more commercially practical forms followed in 1888, by which time Emile Berliner had patented his disc-playing *gramophone*, which allowed the mass marketing of records for the domestic market in the early 1900s. It was the success currently being enjoyed by his 'talking machine', the improved phonograph, that led Edison to commission his employee, William K Laurie Dickson, to build a peepshow device, the *kinetoscope*, not a system of projected pictures, in the 1890s. Edison's successful ex-

ploitation of the kinetoscope as a coin-in-the-slot amusement arcade novelty on the phonograph model in 1894 in turn provided the impetus for European inventors to pursue the goal of projected moving pictures. Though the breakthrough – the projection of photographically obtained moving pictures to a paying audience – was achieved by a photographer, Louis Lumière, with his *cinématographe* in December 1895, it was the American and European pioneers of the phonograph – Thomas Edison and Charles Pathé – who industrialised cinema and set it on its way to its eventual commercially successful pattern of exploitation.

Despite its initial lead, the record industry, hampered by the comparative inflexibility of its acoustic recording method and stultified by a conservative monopolistic industrial structure, made little headway: the gramophone record barely changed between the early 1900s and the mid-1920s. By contrast, cinema was totally transformed in these years, with films developing from one-minute novelties showing domestic scenes and outdoor ‘views’ to potentially epic dramatic spectacles of two or three hours in length. This transformation was aided by the manipulability of film stock (which made longer and more complex works easy to create) and by the fusion of film and narrative, which helped to build up a huge and loyal regular audience. At this time, cinema’s identity as the last of the nineteenth century public entertainments gave it an advantage over the gramophone, which was aimed at a still only partially established domestic market. Cinema’s internal dynamism and film historians’ customary lack of concern with systems of sound transmission has led to the even more startling growth of radio in the 1920s being ignored.

It is true to say that the growth of radio was also underestimated in the 1920s.¹⁸ The extent to which the media born in the nineteenth century were part of a single impulse is shown by the involvement of individuals in two or more media: Samuel Morse, inventor of the telegraph, was a pioneer daguerreotypist, both Edison and Pathé moved from phonograph to film, Lumière invented the cinematograph and perfected the first viable colour system for still photography, and even a failed visionary like Charles Cros dabbled in both sounds and images. (Before failing to get backing for the sound recording system which would have anticipated Edison, Cros had independently deduced the principles of a subtractive colour method for still photography – only to see Ducos du Hauron granted a patent two days before he published his own results.¹⁹) Yet despite this spread of shared interests and involvements, the nineteenth century industries developed quite separately: Eastman never became involved in film production, the giant Victor record company was uninterested in radio²⁰, and Hollywood producers refused initial Western Electric terms for sound conversion which would have involved them in equipment manufacture²¹. But the commercial interests involved in developing radio and bringing electrical recording to the gramophone industry and synchronised sound to the cinema were companies of quite a different kind.

¹⁸ See the comment of the Victor Talking Machine Company’s president, Eldridge Johnson, in October 1924: ‘the radio is not a Victor competitor nor a substitute for talking machines. If the radio ever gets straightened out in America, the Victor company will be greatly benefited’ (cit, Roland Gelatt, *The Fabulous Phonograph*, London, Cassell, 1977, p 217). Within five years Victor had been taken over by RCA: ‘Thereafter it sank into anonymity as the RCA Victor Division of the Radio Corporation of America, its separate accounts no longer a matter of public record’ (ibid, p 247).

¹⁹ Helmut and Alison Gernsheim, *A Concise History of Photography*, London, Thames and Hudson, 1971, p 54.

²⁰ Roland Gelatt, op cit, p 216-218.

²¹ Douglas Gomery, ‘Failure and Success: Vocafilm and RCA Photophone Innovate Sound’, *Film Reader*, no 2, 1977, p 217.

Writing on film technology sometimes implies a continuity between the early fumbling and under-financed experiments with sound and the eventual conversion of the industry in the late 1920s. In fact, the key companies involved in this latter step were the industrial giants already involved in the telephone, wireless transmission and radio: American Telephone and Telegraph (AT&T) and its marketing arm, Western Electric; General Electric (GE) and its jointly owned subsidiary, Radio Corporation of America (RCA); together with Westinghouse. This was therefore no collaboration of equals, but rather a colonisation of the film industry by huge companies seeking fresh profits from their sound patents after the successful conversion of the gramophone industry to electric recording in 1925. RCA had originally been set up to acquire the interests and patents of the Marconi Company from its British owners in 1919 and had subsequently become a focal point for the pooling and cross-licensing of all the radio patents owned by American companies. By the time the move towards the film industry was made, the initial unity of the cartel had been lost: AT&T and GE now acted as rivals (though the cross-licensing of patents remained) and RCA under David Sarnoff was seeking and achieving increased autonomy.

It was in the Bell Telephone Laboratories, which were jointly owned by AT&T and Western Electric and which spent 300 million dollars on research in the two decades before 1940²², that the crucial breakthrough was made allowing the application of the technology developed for radio to the record industry. Similarly, it was the sound system marketed by Western Electric which was adopted by the film industry as a whole in the late 1920s. The record and film industries contained firms of considerable size: the Victor record company was valued at 40 million dollars in 1926²³, and the five Hollywood majors had assets of between 100 million and 300 million dollars in 1930 (though 90% of this was investment in real estate: the valuable first-run film theatres in prime urban sites)²⁴. But RCA was a company of quite a different kind and operating on quite a different scale. RCA owned two of the three US radio networks, and to get production capacity and a distribution network for its radio sets it simply bought Victor. Pushed into second place by Western Electric in the drive to bring synchronous sound to Hollywood and needing an outlet for its own sound system, it set up its own Hollywood major, RKO. When the struggle to convert European cinemas to sound became a battle between Western Electric and Hollywood interests on the one hand, and Tobis-Klangfilm (backed by the German government and the German electrical cartels) on the other, RCA carved its own stake in the market by buying a substantial share in the German AEG company.²⁵ Later it would acquire all the key television patents and spend 9 million dollars on research in the 1930s alone so as to ensure its dominant position in the development of the new medium.²⁶ Indeed it became so powerful that the Federal Communications Commission, in its 1941 report, noted that RCA 'bestrides whole industries, dwarfing its competitors in each', so that it 'occupies a

²² W R Maclaurin, *Invention and Innovation in the Radio Industry*, New York, Arno Press, 1971, p 158.

²³ Roland Gelatt, op cit, p 246.

²⁴ Douglas Gomery, *The Hollywood Studio System*, London, British Film Institute and Macmillan, 1986, pp 34, 52, 77, 102, 125.

²⁵ Douglas Gomery, 'Economic Struggle and Hollywood Imperialism: Europe Converts to Sound', *Yale French Studies*, no 60, 1980, p 86.

²⁶ W R Maclaurin, op cit, p 206.

premier position in fields which are profoundly determinative of our way of life'.²⁷ It would take a long time for the communications industry as a whole to take the form of a conglomeration of multi-media transnational corporations, but the first step in this direction was taken by RCA in the 1920s and 1930s.

Though the huge transformations brought about in the film industry by the introduction of synchronous sound in the 1920s may be misinterpreted, they are at least acknowledged in virtually all film histories which tackle technological issues. But in what seems a curious echo of the old-style search for 'firsts' (the first close-up, the first true angle/reverse angle combination, etc), technological history tends to ignore what happens *after* synchronous sound made its first appearance. Steve Neale's *Cinema and Technology* is typical in making absolutely no mention of the second (and equally significant) sound revolution – that brought about by the introduction of sound tape at the beginning of the 1950s. The studio production methods of the classic Hollywood era from around 1920 to the early 1950s were largely determined by the need to get adequate results from cumbersome sound recording equipment. Tape recorders, which had replaced optical recording for three-quarters of the film industry by 1951²⁸, allowed both greater control within the studio and also freedom to record on location – a key factor in the move away from the studio-movie during the 1950s. In film editing, too, tape brought a new flexibility. Transfer to magnetic tracks (sound tape sprocketed like film stock) allowed sound and image to run side-by-side on an editing machine and prompted experiments to set one against the other. Ways were quickly found to cut and join tape so as to allow sound edits to pass imperceptibly. Moreover it was also discovered that the Scotch tape used to join lengths of sound tape in editing was ideal for joining celluloid too. Whereas the old cement joins used for film editing discouraged experiment, since they involved a loss of two frames at every cut, the new tape splices were easy to adjust, again prompting a more innovative approach. Thus, by the mid-1950s, the technical basis existed for both the more adventurous forms of documentary and the radically modernist experiments with time and narrative in the feature film which are characteristic of the New Wave era.²⁹

Using the same industrial monopoly power which had allowed him to establish his 35 mm gauge as the universal standard at the turn of the century, Eastman had imposed 16 mm as the principal non-professional gauge as early as 1923.³⁰ But it was not until the development of a suitable *sound* system – the Nagra, a fully professional tape recorder just the size of a small suitcase, invented by Stefan Kudelski in 1958 – that the real explosion of 16 mm film production occurred, pre-empting video's emergence as an independent production medium a decade or more later. 16 mm filming had little immediate impact on the feature film industry with its enormous capital investments in 35 mm production methods, but it transformed virtually every other aspect of film-making: it provided television companies with a cheap and flexible

²⁷ Thomas Guback and Tapio Varis, *Transnational Communication and Cultural Industries*, Paris, Unesco, 1982, p 18.

²⁸ Raymond Fielding (ed), *A Technological History of Motion Pictures and Television*, Berkeley, University of California Press, 1967, p 216.

²⁹ One of the rare discussions of the impact of sound tape on film-making is Dai Vaughan, 'The Space Between Shots', *Screen*, Spring 1974, vol 15 no 1, pp 73-85.

³⁰ Jeanne Thomas Allen, 'The Industrial Context of Film Technology: Standardisation and Patents', in Teresa de Lauretis and Stephen Heath, *op cit*, p 31.

³¹ Carl Belz, *The Story of Rock*, New York, Harper and Row, 1972.

³² Graham Wade, *Film, Video and Television - Market Forces, Fragmentation and Technological Advance*, London, Comedia, 1985, p 28.

³³ Robert C. Allen, 'Vitascope/Cinematographie: Initial Patterns of American Film Industrial Practice', *Journal of the University Film Association*, vol 31 no 2, 1979.

means of location filming, prompted the emergence of new low-budget, made-for-television narrative films, created new filmic genres (such as *cinéma-vérité*), redefined documentary film-making and triggered off an unprecedented burst of independent and avant-garde film-making. The effect was yet again to emphasise the singularity of the theatrically distributed, high-budget 35 mm feature film. 16 mm film production did not become a popular mass medium in the way that still photography had done with the spread of the Kodak camera in the 1890s, but access to production and distribution was enormously increased. Inevitably there is a purely sound precedent for this impact of the tape recorder on an audio-visual medium: the transformation of the record industry in the late 1940s, with the multiplication of independent recording companies using the new tape recorder acting as a necessary prelude to the rock 'n' roll revolution in popular music.³¹

II

The pattern is consistent: the phonograph shapes the kinoscope, just as radio gives its pattern of finance, technology, organisation and orientation to television, and sound tape prescribes the scope for video. Virtually the only recent instance of an audio-visual form emerging without a sound antecedent – the laser-read video disc – was significantly a commercial failure, with RCA alone losing an estimated 600 million dollars.³² The system had, therefore, to be relaunched using only part of its technical capacity – as a sound-only system, the compact disc – to achieve commercial viability. It is only when this sound system has reached profitability that the audio-visual video disc is beginning to make a tentative reappearance (in the CD-V format). As depicted in the standard technical histories of film, cinema alone stands apart from this trend: a totally successful form which began as a visual medium, converted to sound only after 35 years and remains to this day an image-dominated system. This, I would argue, is no more than a half-truth. Cinema's uniqueness derives not from its initial (mythical) independence from sound, but from the fact that cinema was the only new entertainment medium which did not focus on the domestic market targeted by George Eastman with the Kodak camera, Emile Berliner with the gramophone, the huge electrical companies with radio and television and the modern multinationals with sound and video cassette systems.

Cinema's theatrical origins are self-evident. In exhibition terms, the Lumière operator initially toured the vaudeville circuit with his cinematograph, just like the conjurer with his props or the trainer with his performing dogs.³³ Subsequently, a pioneer like Adolph Zukor could redefine the film/theatre relationship by hiring the prestigious Lyceum Theatre for the US premiere of *Queen Elizabeth*, as a step towards the construction of purpose-built picture palaces. This theatrical identity of cinema remained unchallenged until the 1980s, when the receipts from television sales and from cable and cassette release began to play a

significant part in production finance for feature films. Similarly the overall structure of Hollywood following the collapse of the Motion Picture Patents Company is clearly dependent on its theatrical identity. The new strategy pioneered by Zukor – a system based on a high quality, high cost product released through ruthlessly controlled prime exhibition outlets – was highly effective in preserving the Hollywood oligopoly.³⁴ Outsiders could easily match the production costs of an individual film, but in doing so they would have invested in a product which could *only* recover its costs through access to the key US domestic market (then as now the biggest in the world) from which they were systematically excluded by the majors. But this system was in turn dependent on the theatrical model of calculating the return of a portion of the exhibition receipts to distributors and producers in accordance with the box office popularity of individual films. Obviously artificial (government imposed) monopoly conditions, if accompanied by tight rules for obtaining franchises or justifying licence fees, can also act as incentives for quality production. But in a totally deregulated market, channels such as television, satellite and cable systems, which operate not through box office returns but by licence fee, by subscription or by selling advertising time, have no such incentive to fund expensive production of distinctively individual (and hence risky) products. Indeed, as the competing distribution channels multiply, the market comes a full circle, back to the pre-Zukor days of Pathé and Edison, when profitability was seen to lie in turning out a constant stream of virtually identical anonymous programme fillers, one-reel dramas turned out by writers and directors at a tightly controlled cost and at a rate of one or two a week.

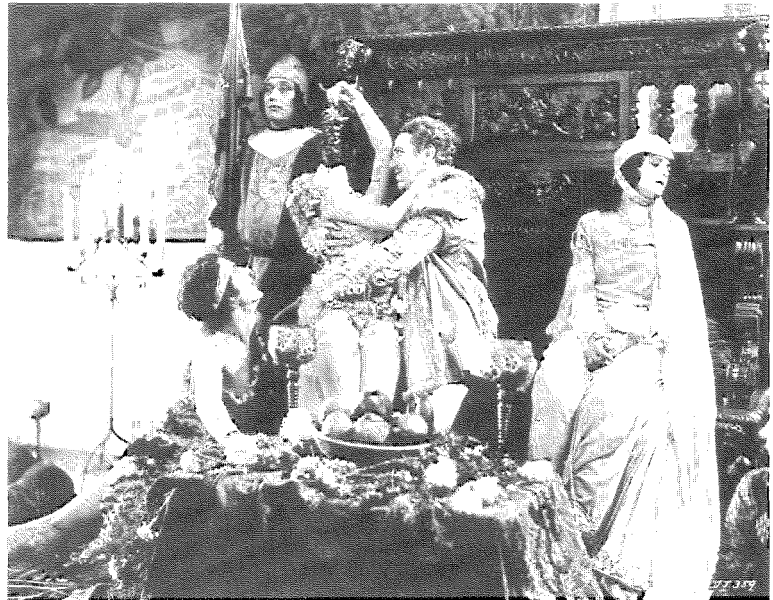
Just as consideration of the theatrical context is vital for any understanding of the commercial development of cinema, so too this same context is indispensable for an understanding of sound/image relations in film. Taken on their own, as archaeological evidence, the strips of celluloid from the 'silent' era which are so lovingly preserved and restored are as incomplete and misleading as the dazzling white marble statues (denuded by time of their paintwork) which allowed Johann Joachim Winckelmann to create his influential eighteenth-century vision of the 'noble simplicity and serene greatness' of Greek art (and incidentally – through a denial of any Egyptian contribution – to offer 'a very early example of modern racial discrimination'³⁵). Mute strips of celluloid taken out of context prompt an equally mythical picture of a pure art of the image, which is demolished as soon as we consider films in their presentational context. The fact that the accompanying words and sounds were not recorded (contemporary limitations of sound amplification made recorded sounds useless for public presentation), does not mean that they can be ignored, and definitions of technology which limit themselves to machines and ignore the context of their application can only mystify still further the very processes they claim to explain.

³⁴ Douglas Gomery, *The Hollywood Studio System*, op cit, p 24.

³⁵ Martin Bernal, *Black Athena*, London, Free Association Books, 1987, p 212.

³⁶ A failure to move beyond the initial social application and consider how the eventual dominant application emerges is the major gap in Brian Winston's otherwise admirable account of the relationship of society and technology in the book already cited, *Misunderstanding Media*.

The context within which early films reached their audiences was that of such entertainments as the music hall, vaudeville and travelling fair, and they were always surrounded by acts using live words and music. Subsequent screenings in large purpose-built cinemas were similarly accompanied by live variety acts up to the end of the 1920s. Given this context, it was virtually inevitable that from the start a film presentation itself would comprise not just strips of celluloid but also two live sound elements, a presenter and a musician (or group of musicians). Though the presenter vanished comparatively quickly from European film theatres, the cinema musicians and the supporting acts did not, and the cost factors involved in these two live sound elements played a key role in motivating the conversion to synchronous sound. It is all too easy to assume that the application of a new medium which eventually becomes dominant was that for which it was invented.³⁶ In fact, this is seldom the case: none of Lumière's contemporaries seems to have foreseen the fusion of film and narrative, and no one anticipated that radio and television would replace newspapers as the population's prime source of news. In the case of cinema there was no obvious prior financial advantage in replacing the intertitles of feature films with synchronous speech, since such a system was untried and no one could know how popular it would be. But there were clear financial savings in replacing the live vaudeville performers, and this was indeed the first application of Warner Brothers' innovative sound-on-disc system in 1926. Equally, the replacement of cinema musicians would offer immediate financial advantages, and this was the second Warner Brothers application, with



Don Juan (1926): the financial inducements for replacing live musicians led to a recorded score.

the musical score recorded for *Don Juan* in 1926. Only when it was discovered that audiences greatly preferred sound films, was there the incentive to undertake the costly transformation of the industry to one which used recorded dialogue as well as recorded images in feature films.

But we must remember that sound – the words of the live presenter and the music of the live performers – had been there from the start. For the verbal presentation of moving pictures there was an existing model in the strategies of the Victorian lecturer with his magic lantern. The Lumières set the pattern for the 1890s when they sent a family friend, the conjurer Félicien Trewey, to present the first London showings of the cinematograph in 1896. While little research has been done, it is generally assumed that the presenter had disappeared in Europe by World War I.³⁷ But a similar mode of verbal presentation persisted elsewhere, in India³⁸, for example, and in Japan³⁹. In a scheme of presentation like this, the images do not dominate and indeed may be reduced to little more than illustrations of a verbal narrative in a performance dominated by the physical and audible presence of the presenter. As Anderson and Richie note in their assessment of the Japanese presenter or *benshi*:

*The more famous had different techniques and sometimes differed widely in interpreting the same film. When dramatic pictures became more common, seeing the same picture with a different benshi often gave the effect of an entirely different movie.*⁴⁰

The same must have been true initially in Europe and the United States, and it is indicative of the importance of the verbal presentation that the first moves towards a more complex narrative structure in the years up to 1906 were not revolts against the tyranny of the presenter, but attempts to capture some of the fluidity of the lantern lecturer's story telling style.⁴¹

The second sound element – the music – was also there in live form from the beginning. The soundless spectres moving on the cinema screen seem immediately to have demanded a musical accompaniment which would, in Hanns Eisler's memorable phrase, 'breathe into the pictures some of the life that photography has taken away from them'⁴². As film-makers in the West developed the complex codes of temporal and spatial organisation which allowed them to discard the presenter and yet build very substantial narratives, music continued to play a key role in the film experience, now serving to bind together into a single flow the photographic images and the explanatory or dialogue intertitles. Music supported the images, but was not swallowed up by them. The musicians maintained an independent status, since they were located unambiguously in the auditorium along with the audience, and the sounds produced were not subjected to mechanical reproduction. Film-makers aspired to create realistic, apparently 'seamless', forms of story-

³⁷ Norman King, 'The Sound of Silents', *Screen*, May-June 1984, vol 25 no 3, pp 2-15.

³⁸ S Theodore Baskaran, *The Message Bearers: The Nationalist Politics and the Entertainment Media in South India, 1880-1945*, Madras, Cre-A, 1981, p 81.

³⁹ Joseph L Anderson and Donald Richie, *The Japanese Film: Art and Industry*, Rutland, Vermont and Tokyo, Charles E Tuttle, 1959.

⁴⁰ *ibid*, p 24.

⁴¹ John L Fell, *Film and the Narrative Tradition*, Norman, University of Oklahoma Press, 1974, pp 122-163.

⁴² Hanns Eisler, *Composing for the Films*, London, Dennis Dobson, 1951, p 59. Though credited to Eisler alone, the book is now known to have been co-written by Theodor W Adorno, so the phrase may possibly be his.

telling, but film viewing involved bringing together three quite separate strands, all bearing part of the meaning: the photographically reproduced and projected images which had to be appreciated pictorially, the written intertitles needing to be read, and the music coming from the spectator's own physical space and environment. There is no fully adequate explanation for the survival of conventionally used background music in cinema after the arrival of sound-on-film, even in ostensibly realistic films. But the persistence of music would seem to point to an inherent *lack* in the images which runs quite contrary to the assumptions of conventional technological history and, indeed, those aspects of film theory concerned with the visual strategies by means of which the spectator is positioned. Certainly what remains striking is the extent to which the cinema, a medium where profits derive unambiguously from mechanical reproduction, was from the start an audio-visual medium, despite the lack of an adequate sound recording and amplifying system and the resultant high salary costs of live musicians.

III

The importance of redressing the imbalance of technological histories of cinema that devalue sound lies in the way that such a shift allows us fresh insight into the whole context of film-making. If Rick Altman's speculations on the history of microphone technology⁴³ are given a weight akin to that accorded to Comolli's 1970s investigations of the camera⁴⁴, then a whole range of 'commonsense' assumptions and hierarchies can be called into question. Film is placed in a new relationship with the radio industry and its technological history ceases to have those artificial amputations which currently make it scarcely comprehensible. To give sound its due is to recognise the crucial significance of the tape recorder. The changes (economic, social, aesthetic) wrought on all aspects of film-making by the advent of 16 mm synchronous sound systems can no longer be ignored, and the interaction of film and television takes on a new appearance and reveals a thirty-year history which no longer can be consigned to footnotes. Sound tape is a clear confirmation that 'invention' in cinema as in any technological form of expression is an ongoing process and, as video tape's immediate ancestor, it opens up new and more fruitful ways of relating film and video.

As far as the film medium itself is concerned, a technological history that gives sound equal weight offers a means of abolishing the stranglehold that the narrative feature film has established over film theory, since it gives a new value to documentary, a form where sound unquestionably holds sway. The traditional film theory approach which focused on the feature film and took as its starting point the screen was bound to deny sound its true weight and importance. The attention was inevitably on synchrony and those systems by which the images appear to produce the sound which we know in fact to be separately recorded and

⁴³ Rick Altman, 'The Technology of the Voice', *Iris*, vol 3 no 1, 1985, pp 3-20.

⁴⁴ Jean-Louis Comolli, *op cit.*

coming to us from a loud speaker in the auditorium. In this perspective on-screen sound is inevitably more significant than off-screen sound, and elements like the musical accompaniment, which might have been probed as a vital yet puzzling phenomenon, could be downgraded to minor additional elements, appendages to the synchronous system which could justifiably be neglected.

Christian Metz's work introduced a new concept to British film theory, the *diegesis* (applied initially to the analysis of cinema, it would seem, by Etienne Souriau). Metz defined this as

*the sum of the film's denotation: the narration itself, but also the fictional space and time dimensions implied in and by the narrative, and consequently the characters, the landscapes, the events, and other narrative elements, in so far as they are considered in their denoted aspect.*⁴⁵

Significantly, though all the elements to which Metz refers are visual, he himself points out that the source of the term is ancient Greek judiciary discourse, where it designates the verbal recital of the facts. In conventional English usage, *diegesis* has developed a double meaning, designating both 'a narrative' and 'a statement of the facts'⁴⁶, and so would seem ideally suited to the analysis of the whole range of filmic expression – not only feature film narrative, but also documentary exposition. Yet film theory, ignoring the opportunity to use the concept as a means of overcoming the built-in limitations of the traditional image-bound metaphors for film (such as the framed picture, the window or the mirror), applied it only to narrative cinema, persisting in the traditionalists' error by designating music and commentary as 'extra-diegetic' and again relegating them to the periphery.

But if we concede that the *diegesis* can equally be a 'statement of the facts' and therefore in purely verbal discourse, then documentary can be rescued from those 'marginal provinces, border regions so to speak'⁴⁷ to which Metz consigned it. The image may rule in conventional narrative, but documentary is self-evidently a form in which the *diegesis* is verbal (there are almost as few documentaries without a commentary or other form of verbal narration – such as a carefully edited collage of interview statements – as there are feature films without dialogue). In professional documentary practice, as in our response as members of the audience, the verbal thread is central, and the images are constantly in danger of being pushed into the 'extra-diegetic': mere illustrations of an argument conducted elsewhere or, at best, evidence to be placed and explained by words (like pictures in the newspapers). We need only to concede the possible equality of sound for the straitjacket of film hierarchies to be destroyed.

A first step in the necessary valorisation of sound which could transform the way in which the technological history of film is written and revitalise film theory might be to explore more fully the impact of sound tape on film. Such an exploration would surely come up with

⁴⁵ Christian Metz, *op cit*, p 98.

⁴⁶ *The Shorter Oxford English Dictionary*, Oxford, Clarendon Press, 1973, vol 1, p 545.

⁴⁷ Christian Metz, *op cit*, p 94.

⁴⁸ Alan Durant, *Conditions of Music*, London, Macmillan, 1984, p 108.

⁴⁹ Ian Rodgers, *Radio Drama*, London, Macmillan, 1982, p 97.

⁵⁰ *ibid*, p 98.

⁵¹ Jacques Attali, *op cit*, p 6.

results parallel to the conclusions already reached with regard to the record industry and radio. In the former instance, Alan Durant tells us, the major impact of tape recording for the listener is 'as a major revision at the recording stage of the manufacturing process employed to make discs':

*Even in early forms, magnetic tape offered new technical possibilities of overdubbing, as well as of splicing together small sections of recorded material; and this extended editing facility had implications from the outset for the logistics, expected proficiency and complexity of recorded performances. At first, too, tape appears to have lowered the capital investment necessary to record music for distribution.*⁴⁸

For the radio listener the impact of the tape recorder was equally significant and Ian Rodger compares it to the way that 'in the nineteenth century the camera suddenly revealed the nature of light'⁴⁹. The tape recorder suddenly made writers aware of the realities of ordinary speech and the nature of silence:

*This response to the revaluation of real speech and the silences within it was not consciously realised by writers at the time. It was a response which was guided less by philosophical consideration than by a sense of craftsmanship. Their ears had been focused to attend the phenomenon of ordinary speech and conversation.*⁵⁰

From there it would be but a step to examine the implications for cinema of the kind of revision which Jacques Attali proposes. If we concede that 'in noise can be read the codes of life, the relations among men', then the film soundtrack – of the documentary as much as the feature film – offers the site to test Attali's proposition that

*Everywhere codes analyze, mark, restrain, train, repress, and channel the primitive sounds of language, of the body, of tools, of objects, of the relations to self and others.*⁵¹

These could be the first steps in a radical questioning of the primacy of the image of a kind undertaken by Foucault and his contemporaries in virtually every cultural sphere except cinema.



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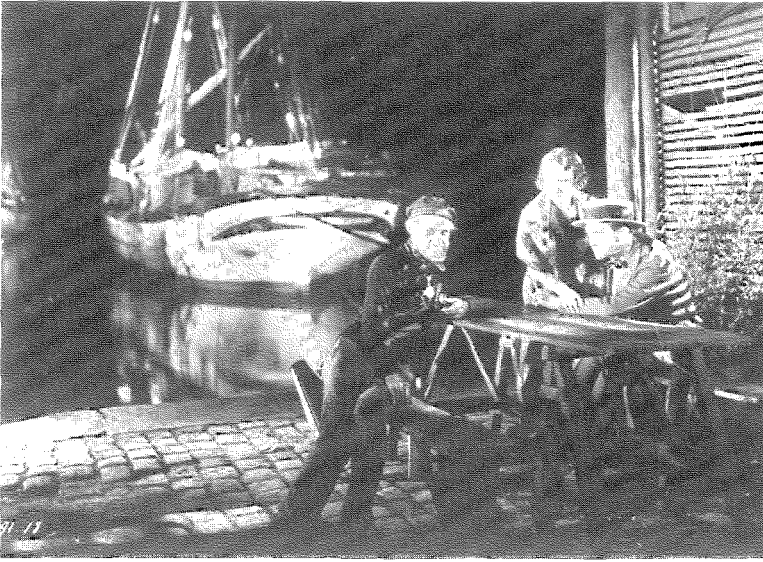
HOLLYWOOD BABEL

GINETTE VINCENTEAU CONSIDERS THE COMING OF SOUND AND THE MULTIPLE LANGUAGE VERSION

IN HISTORIES of the cinema the question of multiple language versions (hereafter MLVs) figures generally as a negligible episode worthy of a line or two, at most a paragraph, which goes as follows: with the coming of sound, films are no longer automatically exportable. Hollywood studios find themselves obliged to produce films adapted to national markets (at least the most important ones linguistically and financially, i.e., the Spanish, German, French and Swedish) in order to satisfy the demand for films in European languages as well as to dodge import quotas then imposed by most European countries. One of two strategies is usually adopted: importing directors, scriptwriters and actors from each country to Hollywood (the MGM solution) or setting up production centres in Europe (the Paramount method). Both solutions, against the background of the Depression, prove equally costly and are rapidly dropped in favour of dubbing, or (more rarely) sub-titling, as we know them today.

Beyond considerable archival difficulties, MLVs have remained unexplored for two main reasons. First of all, in terms of industrial practice, the phenomenon is overshadowed by the sound patents struggle between the USA and Europe for the domination of European markets. Secondly, in terms of an aesthetic history of world cinema, or of the national cinemas concerned, multi-language films, and particularly those produced by Paramount in Paris, are considered worthless – the universally recognised exceptions (*Marius*, *The Threepenny Opera*) being attributed entirely to the talent of their (European) *auteur*. Historian Charles Ford's opinion on the subject is

Marius (1931): one of the few critical successes among the early MLVs.



typical: 'In eighteen hectic months at Joinville Paramount produced only one film that is still remembered (*Marius*)'¹.

My intention is not to attack this interpretation of film history in order to replace it with my own version, although even a quick scan through *Variety* of that period reveals facts and positions much more complex than is usually recognised. There is a mass of archaeological work to be done². Nor is the point to unearth forgotten 'masterpieces' (there probably aren't any), though of course our view of the history of that period is precisely coloured by the Ford-type search for 'masterpieces'. My intention is, rather more modestly, to shift the terms of the debate and concentrate on what is generally regarded as a *weakness*. MLVs interest me because they failed: aesthetically these films were 'terrible', and financially they turned out to be a disaster. However, it seems to me that they can be of use to the historian as they are located at the point of contact between the aesthetic (this term being used here rather loosely to cover cultural, thematic and generic constructs) and the industrial dimensions of cinema. In this sense they can become precious instruments of knowledge for a crucial period of the history of cinema. Beyond the debate on European resistance *versus* American cultural imperialism, the different solutions applied to linguistic and cultural barriers raise generic, theoretical and ideological questions that are also important for an exploration of the notion, apparently self-evident but rarely challenged, of national cinemas.

I

MLVs were usually films shot *simultaneously* in different languages, in

¹ *Films in Review*, November 1961.

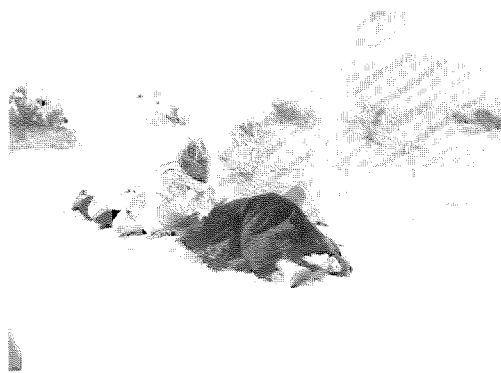
² A work which is no doubt currently facilitated by changes in attitudes to film history as well as the greater availability of prints.

one of several fashions:

- Where a film was shot in two or three languages only, the director was often the same; Pabst shot the German and French versions of *The Threepenny Opera* in Berlin, Lubitsch the French and US versions of *One Hour With You* in Hollywood, Jean de Limur the French and US versions of *The Parisian* in Paris, etc. This formula tended to be used, although not exclusively, in European studios.
- For higher numbers of versions (up to 14), particularly at Paramount, each version could have a different director, generally of the nationality corresponding to the language used. *The Lady Lies* (Paramount), for instance, had as many directors as versions (six). Sometimes the same director shot two or three versions. Charles de Rochefort in his memoirs remembers having shot the Czech and Romanian versions of *Paramount on Parade* (and Raymond Chirat's catalogue attributes the Italian version to him too).
- For actors the permutations were as numerous. When polyglot actors were used, the star of the film could remain the same while the rest of the cast (except extras) changed. Claudette Colbert and Maurice Chevalier are the stars of the US and French versions of *The Big Pond*; Brigitte Helm stars in the French and German versions of *Gloria, Gold* and *Die schönen Tage von Aranjuez*; Adolphe Menjou in the French and US versions of *The Parisian*, etc. In other cases, the whole cast was different, the individual combinations on the whole being dictated by the coincidence of linguistic competence and script requirements. In *Baroud* (directed by Rex Ingram), Pierre Batcheff, a Russian émigré living in Paris at the time, plays the part of an Arab in both the French and US versions of the film.

There is a second type of MLV: films made from the same source material, but with a short time gap. This category is more difficult to define and catalogue, as the filmographies available adopt different criteria. Variations can be considerable: EA Dupont shot the French version of *Atlantic* in January 1930 after he had directed the German and English versions in July 1929 in London. Two years after he had directed *L'Equipage* in Paris, Anatole Litvak remade his own film under the title *The Woman I Love* in Hollywood. Should *Atlantic* be considered a trilingual film and *The Woman I Love* a remake? Herbert Mason shot *First Offence* (also known as *Bad Blood*) in London, based on *Mauvaise Graine* which Billy Wilder had shot in Paris a year before. The country of origin, the studio, the cast and the director were all different. Yet the production of *First Offence* attempted to copy *Mauvaise Graine* to the letter: careful duplication of outdoor locations, meticulous research to retrieve as many as possible of the original costumes; some actors were even imported for character parts (such as Maupi, out of the Pagnol stable, who plays the same part as in *Mauvaise Graine*, speaking execrable English). The two films are remarkably similar, except for the superior quality of the sound in the English version.

The two main categories above still have enough in common to be



Atlantic (1929-30):
top left, the German
version; right, the
English; below, the
French.

considered as part of the same phenomenon. In both cases the intention is to adapt the same text for different audiences, within a short period of time. Remakes as we know them now tend to copy an older text, appealing to the cinematic memory of the spectator. The relationship between the two versions (e.g., of *Scarface*, *A Star is Born*, *Breathless*) is diachronic, in MLVs it is synchronic. The distinction is important as one of the main characteristics (and limitations) of the MLV is that only one version is given to a particular audience who in most cases has not (and more importantly must not have) any knowledge of the others³.

Finally a third, small, category must be mentioned: the polyglot film, in which each actor speaks his or her own language, such as Pabst's *Kamaradschaft* and Duvivier's *Allo Berlin! Ici Paris*. Unlike other attempts like *Camp Volant* (Max Reichmann) or *Les Nuits de Port Said* (Léo Mittler), these two films were very successful, which clearly has to do with the fact that they integrate diegetically the inter-lingual apparatus which is their industrial *raison d'être*.

³ Except in very rare cases where some art cinemas experimented with showing several versions of the same film (but then always *auteur* films) – for instance, the Studio des Ursulines in Paris programmed French and German versions.

Seen from Europe, the coming of sound only reinforced US hegemony. Nino Frank, in his essay on the Paramount studio in Paris entitled 'Babel-on-Seine', summarises the situation thus: 'One would have thought that the "100% talkies" by establishing cinematic national borders, would demolish the American penetration of our studios. Well, rather the opposite: we are the new Eldorado. The Americans are upon us, loaded with millions of dollars, and they merrily start reorganising French production'⁴. On the other side of the Atlantic, however, the Society of Motion Picture Engineers saw the situation in a different light: 'The demand of people for films in their own language plus the difference in technique between the silent and sound picture is operating to increase competition for American films abroad'⁵.

Nino Frank's error was to call Europe the *new* Eldorado. As the Society of Motion Picture Engineers put it, 'Europe, [...] after all, remains our principal revenue market'⁶ (though, as a matter of fact, the profitability of US films for foreign markets was hotly debated within the studios). By ascribing the reorganisation of the French industry caused by the coming of sound only to the US, Frank was also ignoring the 'helpful' role played by French personnel such as Bernard Natan (of Pathé-Natan), who was responsible for installing the RCA sound system in most French studios, over and above the interests of European patents.

MLVs, as a film industry phenomenon, are situated along a rather blurred line of division between the two types of discourse mentioned above: that of a European resistance (however ephemeral, disorganised and doomed to failure) to US hegemony, and that of a continued expansion by Hollywood in the face of a sudden increase in foreign competition. For, despite the instant success of *The Jazz Singer* and other early Hollywood sound productions, the news of hostile reactions – sometimes going as far as riots⁷ – started flooding in from all over Europe and South America, from audiences outraged at the shoddy adaptation of US films (with the addition of sub-titles, music and dubbed passages) they were presented with. At the same time, the popular success of German and French speaking films in Berlin and Paris was becoming increasingly evident.

The first MLV was an Anglo-German production: *Atlantic*, shot by EA Dupont for British International Pictures in these two languages at Elstree, and which came out in November 1929 (with a third, French, version shot at the beginning of 1930). Then came another Anglo-German film also shot at Elstree, *The Hate Ship*, followed by American MLVs shot in Europe – United Artists produced *Knowing Men* (Anglo-German) and Warners Brothers *At the Villa Rose* (Anglo-French), both made in London. (Meanwhile some US studios briefly produced a few films in foreign languages only, such as *The Royal Box*, shot by Warner Brothers entirely in German.⁸) The first film with a French version

⁴ Nino Frank, *Petit cinéma sentimental*, Paris, La Nouvelle Edition, 1950.

⁵ CJ North and ND Golden, 'Meeting Sound Film . . . Competition Abroad', *Journal of the Society of Motion Picture Engineers*, December 1930, p 750.

⁶ *ibid*, p 752.

⁷ For example, in Poland where audiences rebelled (June 12, 1929) against German sub-titles and in France (December 9, 1929), where seats were torn out at a screening of *Les Innocents de Paris* in Nice.

⁸ *Variety*, November 6, 1929.

shot in Hollywood was *The Unholy Night*, directed by Jacques Feyder for MGM. These had been preceded by a few shorts in foreign languages produced by various US studios, notably Paramount. Purely European MLVs continued to be produced through the 1930s (although their production slowed down after 1933), but the vast majority of MLVs were made under the impulse of Hollywood studios. It is on these that I will concentrate⁹.

On October 2, 1929, *Variety* announced that 'while Paramount is in the lead in foreign tongue shorts production, Warner Brothers is ahead on features. These two companies, of all in the field, so far as could be ascertained, are the only companies indulging in this foreign stuff'. What was first considered an indulgence soon became a necessity. A month later, the same paper declared that, apart from projects by Paramount to shoot *The Big Pond* in French, Radio (RKO) was making its first steps towards the 'invasion' of foreign lands (with the dubbing of *Rio Rita* in Spanish and German without, however, any illusions about the efficiency of the dubbing system), that MGM was about to make foreign versions of practically all its films (to start with, a German version of *Sunkissed* directed by Victor Sjöström and a Spanish version of *The Siege of Seville* by Ramon Novarro) and that Fox had decided not to waste any time with dubbing but to start straight away with MLVs produced in Europe.

Although they are generally seen as manifestations of the efficiency of the Hollywood machine, US-generated MLVs are, under close inspection, symptomatic rather of a great deal of disorganisation, despite the creation, in February 1930, of a special commission of the Academy of Motion Picture Arts and Sciences, responsible for consultation between major studios and with the aim of reaching a standardisation of foreign language films¹⁰. The reason for the failure to reach such standardisation for many years can be understood if MLVs are seen as symptoms of one of the basic characteristics of the film industry (as of all capitalist industries), the constant tension between the necessity for standardisation to increase profitability on the one hand, and on the other the need for differentiation to ensure the renewal of demand. MLVs were, on the whole, too standardised to satisfy the cultural diversity of their target audience, but too expensively differentiated to be profitable.

Despite assertions to the contrary, dubbed films did not come after MLVs but preceded them, their low cost making them desirable despite the recognised technical deficiencies of the dubbing process. Articles in *Variety* over the period 1929-1932 reveal an incredible confusion on the subject – strategies varied between studios, and changes of policy within a studio were common. On April 9, 1930, *Variety* indicated that 'All foreign picture managers [...] have reached different conclusions as to the solution which at the moment is the leading trade question. Most are in the air and stalling while they wonder if the potentialities of foreign markets are worth the cost.' On January 14, 1931, MGM 'is still uncer-

⁹ On Franco-Italian versions, see one of the few articles on the subject by Rémy Pithon, 'Présences françaises dans le cinéma italien pendant les dernières années du régime mussolinien (1935-1943)'; in *Risorgimento*, 1981-2/3, pp 181-195.

¹⁰ *Variety*, February 12, 1930.

¹¹ *ibid*, January 14, 1931.

¹² *ibid*, April 9, 1930.

tain whether dubbing or direct shooting (in a foreign language) is the best policy'¹¹. So, in spite of the self-satisfied Hollywood discourse on its superior competence in terms of planning, it was precisely the lack of long-term strategies which engendered this confusion. The fiasco of Spanish versions in Latin America offers a good example.

As soon as the question of foreign versions came up in Hollywood, the Latin American Spanish-language market was clearly the most attractive, in terms both of audience and number of theatres. All studios immediately launched into Spanish versions, facilitated by the presence of Spanish-speaking personnel in Los Angeles. Two years later, most of that production had to be declared redundant; not only did many linguistic blunders hinder distribution, but they lacked outlets, as many cinemas in South America had not converted to sound. Hesitation was the order of things, policy within studios changing from day to day, following the success or failure of individual films.

Equally, once the principle of MLVs was accepted, the debate shifted to the location of production. There, too, the standardisation/differentiation dialectic operated. Policies switched between production in Hollywood, more cost-effective and conducive to standardisation, and production in Europe, economically less favourable, but more apt to adaptation to local needs, thus to product differentiation. In May 1929, Jesse Lasky confirmed Paramount's intention to make films in foreign languages in France, while Warner Brothers opened studios in Germany and Britain. In March/April 1930, Paramount and MGM were openly in favour of films made in Europe, to ensure better choice of foreign actors at a lower cost, except for Spanish-language versions. Warner Brothers acquired 20 per cent of Tobis-Klangfilm and signed an agreement with Nero for the production of ten films in June 1930. By September 1931, all major US studios had established a presence (in terms of production, that is, since most of them were already present as distributors) in Europe: Warner Brothers, Universal, RKO, Paramount, United Artists and MGM in London; Paramount, United Artists and Fox in Paris; Fox and United Artists in Berlin.

The high water mark for European-made MLVs was reached in July 1930, when *Variety* announced that 75 per cent of all foreign language films would be produced in Europe over the next six months, soon to be followed by the entire production, within a year. A major exception was MGM, Arthur Loew having declared that foreign-language versions had to be made in Hollywood 'in order to combine the genius of Hollywood with the European mentality'¹².

Whatever the location of production, however, multi-language films meant an enormous increase in costs. In December 1930, for instance, MGM had more than 60 foreign actors, scriptwriters and directors under contract in Hollywood, at a total estimated cost to the studio of 40,000 dollars a week (most of the foreigners were repatriated in February 1931). Productions in Europe, however, were not much more profitable, and both types of solution were thus soon revealed to be

equally inadequate. By late 1930/early '31, most Hollywood studios concluded that their main error had been importing foreign personnel to Hollywood, while a US official report on foreign trade strongly advised the film industry not to set up production units in Europe. Their conclusions seem to have been based on the performance of Paramount's Joinville studio, near Paris, which cost 1.5 million dollars in fixed investments and had an annual salary bill of six million dollars¹³. Later, Paramount would admit that the Joinville studio only became profitable after two years of operation, by which time it had become a simple dubbing laboratory.

III

The activities of the Paramount studios in Joinville have attracted enough attention for it to be unnecessary to dwell on the more picturesque details – crews of all nationalities sharing canteen tables, sound stages working 24 hours a day, and the like. Observers such as Ilya Ehrenburg and Marcel Pagnol (who also satirised it in his 1938 film *Le Schpountz*) have left lively accounts of this particular episode¹⁴. But the myth which has developed around Joinville needs re-examining on a couple of points. First, it is as well to remember that this ostensibly American production-line method (so apparently incompatible with 'European sensitivity') actually originated in London and Berlin. As *Variety* of May 7, 1930, put it, 'Elstree, London's Hollywood, started that idea of working different companies day and night, leaving the sets standing'. Secondly, though legend has it that Bob Kane and his team at Paramount were blind to the gap between its films and their local recep-

¹³ *ibid.*, January 14, 1931.

¹⁴ Nino Frank, *Petit cinéma sentimental*, op cit; Henri Jeanson, 'Cinq semaines à la Paramount, choses vécues', *Le Crapouillot*, numéro spécial, November 1932; Ilya Ehrenburg, *Usine de Rêves*, Paris, Gallimard, 1936; Charles de Rochefort, *Le Film de mes souvenirs*, Paris, Société Parisienne d'Édition, 1943. Marcel Pagnol, interview in *Cahiers du cinéma*, no 173, December 1965.



The Parisian: a Joinville MLV with office notices in both French and English.

¹⁵ *Variety*, January 14, 1931.

¹⁶ *Ibid.*, January 21, 1931.

¹⁷ Dudley Andrew, 'Sound in France: the Origins of a Native School', in *Yale French Studies*, no 60, 1980, pp 94-114; Douglas Gomery, 'Economic Struggle and Hollywood Imperialism: Europe Converts to Sound', *Yale French Studies*, no 60, pp 90-93.

¹⁸ *La Cinématographie française*, September 23, 1938.

tion, constant adjustments were made. The material (often plays) on which the films were based changed from predominantly North American to local texts. In January 1931, Kane also decided to reduce the number of versions to French, German, Spanish and Swedish, in order to 'give their production for each one of these countries a more individual treatment, such as is now necessary on account of local improvement in production'¹⁵, adding that 'There's a better chance of bringing up the quality of the Paris made pictures than of lowering the cost of the versions here'¹⁶. These adjustments did not prove sufficient. The Depression, as well as internal difficulties within Paramount (as Dudley Andrew and Douglas Gomery have shown¹⁷), contributed to the end of the Joinville studio as a production unit in July 1932. In other parts of Europe, as in Hollywood, studios reverted to dubbing, more economical (about one third of the cost of a MLV) and by now somewhat improved.

Finally, another solution was applied, which consisted in selling the rights to a script as soon as a film had been distributed in a country, a method rightly considered detrimental to European cinema. PA Harlé, the editor of the main French trade journal *La Cinématographie française*, warned his readers that: 'The sale of the story of a French film can ruin its career abroad. It is a new method. Instead of selling *Pépé le Moko* in America, its subject was sold. Not only will the Gabin film not be shown on the other side of the Atlantic, but even in French-speaking countries, *Algiers*, with Charles Boyer in the Gabin part, will be shown instead of the French original!'¹⁸



Algiers (1938): the Hollywood remake of *Pépé le Moko*.

The relevance of MLVs to a history of the cinema goes beyond economic and industrial factors, though. Other variables, notably cultural and technical, come into play. The main period of MLVs (1929-1932) more or less corresponds to the time lapse necessary for Hollywood to establish the sound cinema and for film-makers to integrate sound to their practice acquired during silent cinema so completely that, according to David Bordwell, 'By 1933, to make a sound film corresponded exactly to shooting a silent film only with sound'¹⁹. The struggle to improve and impose sound technology was combined with a struggle to improve and impose its *credibility* and given the primacy of the human body and thus the human voice, that of dialogue.

Much attention was paid, at the beginning of sound cinema, to the relationship between sound and the 'reality' of hearing. Linguistic barriers added another dimension to this problem. However, at the same time, there was also concern with the audibility of dialogue.²⁰ This tension between the desire for a certain auditory 'realism' and the necessity for audible dialogue explains why dubbing was not immediately accepted by either audiences or critics. The coming of sound caused not just technological problems, but altered fundamentally the relation of spectator to film.

In one issue of the *Journal of the Society of Motion Picture Engineers*, a sound engineer asked the following question: 'As the chief objection to [dubbing] as straight dialogue is the fact that it shows actors talking perfectly in a language of which obviously they have no knowledge [...] I wonder if any American producer has ever considered saying quite frankly to his foreign audience by means of an explanatory title, that while the actors do not speak the language in question, it was considered fair, in the interests of realism, to employ voice doubles'²¹. Dubbing, a process which underlines the separation between body and voice, disconcerted audiences of the late 1920s/early 1930s. Speaking of the dubbing of Anny Ondra by Joan Barry in Hitchcock's *Blackmail*, *Film Weekly* asked: 'What if the voice, tired and resentful of anonymity, clamours for publicity, to be featured as itself? [...] like the Siamese twins, Face and Voice are inseparable, the death of one implying the death of both.'²² Dubbing upset the feeling of unity, of plenitude, of the character, and thus the spectator position. Moreover, it produced in the contemporary audience a feeling of being duped. A trade paper announced in June 1930: 'Dubbed films are easily recognized as such by audiences who daily get more sophisticated'²³. Dubbing was on the whole accepted only because of its novelty, and even then it was considered that it would 'go for a while on the novelty angle'²⁴ but would soon be found unsatisfactory on account of poor synchronisation.

The very naïveté of these reactions draws attention to a problem which is not so much repressed as transparent. The millions of non-

¹⁹ David Bordwell, Janet Staiger, Kristin Thompson, *The Classical Hollywood Cinema*, London, Routledge and Kegan Paul, 1985.

²⁰ Théophile Pathé, 'Doublage du film étranger', in *Le Cinéma*, Paris, Corrêa Editeur, 1942. Rick Altman, in a paper delivered at the 1985 Cerisy conference on Film History, noted a similar concern expressed by US sound engineers at the coming of sound.

²¹ CJ North and ND Golden, 'Meeting Sound Film Competition Abroad', *op cit*, p 757.

²² *Film Weekly*, September 30, 1929.

²³ *Variety*, June 18, 1930.

²⁴ *ibid*, November 6, 1929.

English-speaking contemporary spectators of *Dallas* know that Sue Ellen does not speak their language, but they do not care very much. In a similar situation, the spectators of 1930 would have perceived an incongruity. It is as if, at its beginning, sound film having just offered a new sense of completeness to the spectator in reconciling body and voice, then immediately upset it by the lack of credibility of dubbing or the sound/image dislocation of sub-titles. MLVs tried to remedy this by the extreme solution of dubbing the body of the actor – until the new norm of dubbed films (or marginally sub-titled films) finally managed to incorporate all these changes and disturbances, thus making MLVs redundant. The linguistic problems, if they underline some of the factors relating to the role of sound in the constitution of the spectator as subject, do not, however, modify them fundamentally. Reasons other than economic for the failure of MLVs are to be found elsewhere – in the field of cultural specificity, as well as casting and narrative patterns.

V

In the aesthetic history of European cinema – I will concentrate on French cinema, but I believe my conclusions to be applicable to other European national cinemas – MLVs belong to the despised category of ‘commercial’ cinema of the early 1930s. The notion that it is possible to make several versions of the same film, like a piece of clothing in different colours, was/still is abhorrent to the critic, historian or *auteur*. All commentators on MLVs, whether politically to the right or to the left, were unanimous in their condemnation. ‘On the seven stages,’ said Ilya Ehrenburg, ‘work is going on day and night. There are shifts for directors, concierges, caterers’²⁵, while Charles de Rocheford remembered that ‘from 8am to 7pm, a Serbian version; from 8pm to 7am, a Romanian version . . .’²⁶, and Nino Frank added, ‘They shoot while they eat, shoot while they sleep, shoot while they wash, shoot while they talk’²⁷. One critic from the ultra-right journal *Action Française* declared: ‘We are fed up with these counterfeiters who should be punishable by law, with this cheat which consists of putting the name of a famous *auteur* on some miserable “ersatz” by a third-rate director’²⁸.

The important point here is that the criticism of MLVs always went hand in hand with a phobia of the cinema in its industrial as opposed to artistic dimension. Directors of MLVs or ‘remakes’ were no more flattering. René Clair, who shot *Break the News* in Britain (the English-language version of *Le Mort en fuite*, directed by André Berthomieu), declared ‘it ought to be burned [. . .] it was based on an idea which had been used already for another film; and that kills all inspiration’²⁹. As Clair’s opinion exemplifies, the main objection to MLVs from European ‘art’ directors was their standardising attitude to film-making, a conception of cinema tainted by its lack of concern for originality and

²⁵ Ilya Ehrenburg, *Usine de Rêves*, op cit, p 117.

²⁶ Charles de Rocheford, *Le Film de mes souvenirs*, op cit, p 212.

²⁷ Nino Frank, *Petit cinéma sentimental*, op cit, p 66.

²⁸ *L’Action française*, October 24, 1930.

²⁹ René Clair, interviewed by John Gillet, *Focus on Film* no 12, Winter 1972, p 41.

creativity. On the other hand, the necessity of showing films in the language of their country of exhibition confronted Hollywood with the ethnic, linguistic and cultural diversity of its audience. Suddenly studios were aware that Latin American audiences did not appreciate films in Castilian accents, that British accents provoked mirth in the Midwest, and that in the Midlands Yankee voices seemed equally funny. Hollywood was also alerted to a large ethnic range on its home territory³⁰.

Such cultural diversity ran counter to the need to rationalise production costs, making MLVs an exemplary meeting point of the economic and the cultural. The irreducible nature of cultural difference even affected the attempt to standardise shooting schedules. It became the practice early on to divide shooting time into as many arbitrary units as there were different languages (for a simple bilingual version, one team worked days, the other nights; in the case of three languages, each team worked for eight hours, etc), since the more logical break-down, by scene, proved impossible. It was found that the same scene required widely different screening times according to the country it was destined for³¹.

Not only did cultural difference upset the rationalisation of the shooting process; it could also undermine success based largely on technical superiority. *The Unholy Night*, an MGM prestige production, from a novel by Ben Hecht and directed by Jacques Feyder in Hollywood, scored very disappointingly at the box-office when it came out in its French version in Paris. *The Parisian*, on the other hand, a formulaic filmed play about the return of the illegitimate son of the hero (Menjou) at the age of 20, produced by Pathé-Natan and directed by Jean de Limur, was a triumph. Clearly the major element in box-office appeal was not production values, but the audience's familiarity with certain narrative patterns, as this contemporary commentary made clear: 'Story would be simply impossible in Hollywood [...] Mere glance at the idea furnishes ample proof that the Americans are disqualified by temperament from picking themes for this market. Such a story wouldn't get a second glance in California. Here it is accepted quite placidly'³². What is brought out here is the crucial importance of intertextual familiarity with genres and narrative patterns in the source material – in this case the boulevard play and its archetypal plot revolving around illegitimacy and adultery – for audience appeal and identification. It could be objected that this analysis disregards the importance of the director. The example of *L'Equipage* shows the auteurist factor to be minimal in this case.

Though shot with a time gap, *L'Equipage* (Pathé-Natan) and *The Woman I Love* (RKO) are typical MLVs in that they share the same source material (a novel by Joseph Kessel), the same director (Anatole Litvak), the same music (Arthur Honegger) and some scenes re-used wholesale – a staple technique of MLVs where crowd and street scenes were generally presented in long shot and used as a basis for all versions. Despite being virtually the same film, *L'Equipage* was much more suc-

³⁰ *Variety*, May 7, 1930.

³¹ As *Variety*, May 7, 1930 put it, 'The French thought they'd top it by having all companies and making scene by scene, only to find what might merit expansion and building-up for French edification did not go for another audience.' As the example of *L'Equipage/The Woman I Love* below suggests, this scene by scene discrepancy is another characteristic of MLVs.

³² *Variety*, May 7, 1930.

cessful with audiences in France than *The Woman I Love* in the USA, a difference hard to impute to the actors, Miriam Hopkins being at least as considerable an actress as Annabella, and Paul Muni (who had just received an Academy Award) as Charles Vanel. Contemporary reviews of both films show that the US version does not 'work' as well as the French one. Two reasons can be found: the credibility of the plot, and the question of morals.

Changes to the film show that an attempt was made to adapt the story to fit American censorship and moral codes. The French version begins on a platform at the Gare de l'Est in Paris in 1918: the hero, Herbillon (Aumont) is going to the front, saying his farewell to both his family and a young woman, Denise (Annabella). The couple exchange vows of eternal love. The young man is going to join the other member of his air crew, who is, unknown to all characters, none other than Denise's husband (Maury/Charles Vanel). The US version adds a long scene prior to the station platform *adieux* which aims to anchor the film in the myth of Paris for a North American audience (the couple meet at an operetta called *Love in Paris*). More importantly, it shows Denise as seduced by Herbillon against her will. Later on, when Herbillon confronts her with the 'horror' of her adultery (for he has come to like and respect her husband), reference is made to the beginning of the film and she reminds him that he initially pursued her. In the French version Denise is left to take full responsibility – and guilt – for her desire for Herbillon. Despite this effort at adaptation, however, the character played by Hopkins was considered by several contemporary critics as 'unsympathetic'. The relative failure of the US version is easier to understand if we consider the narrative, and the fact that a considerable number of French films in the '30s privileged the symbolic or real father-daughter axis to the detriment of other Oedipal relationships (see most films with Raimu, Jules Berry, Victor Francen, Harry Baur and, indeed, Charles Vanel). The relationship between Annabella and Charles Vanel in *L'Equipage*, and the fact that the lover of her own age loses out to the older man, was

L'Equipage (1935) left, and *The Woman I Love* (1937): a French tale of adultery and comradeship which didn't translate.



perfectly acceptable to the French audience of 1935, but less so to North Americans accustomed to different models, among them the victory of the young pretender³³. Equally, the accent that the French version puts on male bonding, also culturally typical, runs against the stronger drive in contemporary Hollywood films toward the romantic heterosexual couple.

The contrast between acceptance in one culture and rejection in another is characteristic of US-produced MLVs. When contemporary reviews in the country of exhibition can be traced, they constantly show such discrepancies. *Une Femme a menti*, a Paramount production which triumphed in Paris, outraged Italian audiences (under the title *Perché No!*). The Hungarian version of *The Doctor's Secret* was a resounding flop domestically, despite – but also because of – the fact that its crew and cast included great Central European names. The production was cheap: the same decors were used for the eight versions of the film, totalling 49,000 dollars (whereas the contemporary French and Spanish language versions of *Olympia* cost 100,000 dollars each). The same costumes were used in all versions, and the Hungarian public were apparently shocked to see their national star Gizi Bajor so poorly dressed. The reception of the Polish version of *The Doctor's Secret* in Poland is equally telling: there, the fact that the version had been filmed by a Polish director of repute (Ryszard Ordynski) provoked negative reactions on account of the perceived discrepancy between the status of that director and the mediocrity of the film.³⁴

Besides, Hollywood's vision of a country rarely coincided with the idea that country had of itself. Hence the hostile reactions in European countries to films based on North American texts. As *Variety* put it: 'We have tried to understand the Spanish psychology, given them pictures about things of which they know more than we do and have naturally laid ourselves open to ridicule'³⁵. Not surprisingly, closer cultural understanding between European countries promoted better reception of European produced MLVs like *Le Tunnel* and *The Threepenny Opera*.

VI

Actors in MLVs are another locus of conflict between cultural and economic factors, as well as a focal point for the contradiction inherent in the tendency towards both standardisation and differentiation. In principle, the advantage of MLVs was that they allowed the possibility of using local stars, but this turned out also to be their drawback. One of the major reasons for the success of Hollywood films with non-American audiences was the attraction of stars who had become international. Conversely, one of the main obstacles to the export of European films to the USA was their actors' relative lack of celebrity. MLVs underlined and reinforced this situation. As *Film Weekly* remarked: 'No longer will British actors be able to increase their following by appear-

³³ See Martha Wolfenstein and Nathan Leites, *Movies, a Psychological Study*, Glencoe, Illinois, The Free Press, 1950, and Ginette Vincendeau, 'The Eye of the Father, Oedipal Narratives in French Films of the 1930s', *Iris*, forthcoming.

³⁴ Marek Halberda, 'Polskie filmy made of Paramount', *Kino* (Poland), May 1983, pp 22-25.

³⁵ *Variety*, January 7, 1931.

ing in foreign cinemas; no longer shall we see German and French artists on our screens. If multi-lingual talkies succeed, as I think they are bound to, stars, instead of being international, will be purely local'³⁶.

Against this potential obstacle, Hollywood had recourse to polyglot stars: Adolphe Menjou, Maurice Chevalier, Brigitte Helm, Greta Garbo. But here again, interesting contradictions emerged. The foreign accent, for example, had to be diegetically integrated. That being so, it had to be light enough to be acceptable, but strong enough to be picturesque (allegedly Chevalier was forbidden by Paramount to take English lessons). But for the majority of those who could act in only one language, other problems surfaced.

Beyond their impact in the film itself, the commodity value of actors was greatly curtailed by MLVs. For instance, foreign actors posted in Hollywood were encouraged to limit their press statements to the press of their country of origin, as their publicity potential in the USA was nil. Too Americanised for their compatriots, but condemned to remain foreigners in the USA, they were relegated to a sort of media 'no man's land' which uncannily reflects the fate of the MLVs themselves. On the whole, the film industry of their own country was not too happy about their presence on US territory, and in some cases went as far as taking sanctions against them (concurrently, the French actors' union tried to stop its members accepting dubbing work). But, more importantly, it became evident that too much publicity for actors working in MLVs, in Europe as in the United States, inevitably attracted attention to the 'production-line' aspect of these films, and provoked possibly detrimental comparisons – for example, if stars in another version were of higher international status. This goes some way towards accounting for the striking lack of publicity given MLVs at the time.

More work needs to be done on the part played by actors in the inflection given to the different versions of a same film. Ideal candidates for comparison are obviously those where the only variable is the actor, as in Pabst's *Threepenny Opera*. The tremendous success of the French version in France, for instance, can be attributed in part to the deliberate effort by the actors to provide easier access to a 'foreign' text. Albert Préjean made no mystery of having tried to turn Mackie into a sympathetic character to fulfil his French audience's expectations. However, it is difficult to judge the success of such strategies at an historical distance. Restrospectively, Jean Gabin in Kurt Bernhardt's *Le Tunnel* (1933) brings to his character the existential weight incorporated in his 'myth' of the 1930s, particularly compared to Richard Dix, his equivalent in the British-made version (*The Tunnel*, directed by Maurice Elvey). Where Gabin is intense, Dix is neutral. The question is whether the value we attribute to Gabin, which derives from the accumulation of all his other parts, was perceptible in 1933.

Actors in MLVs, then, were in a contradictory situation. If they were famous, they invested the film with particular traits for their audience; for instance, Jessie Matthews in *First a Girl* takes the film in the direc-

tion of her 'clean and cheerful' persona, the opposite of the highly ambiguous rendering of the same character by Renate Muller in the German version, *Viktor und Viktoria*. In a way, the ideal actor in MLVs was an unknown, someone who could be easily moulded (which is what MGM tried to do), but the films then suffered in both impact and publicity value.

René Jeanne and Charles Ford³⁷, among others, attributed the failure of MLVs to the fact that most of them were adaptations of plays. However, as the success of films such as *The Parisian* shows, the failure of most MLVs came not from their excess of 'theatricality' but rather from their insufficient relationship with generic and narrative patterns of French theatre with which the contemporary audience was familiar. A similar study of other national contexts would almost certainly reveal similarities.

In conclusion, I would venture that the main usefulness of MLVs for film history and for the '30s in particular may be to point towards a better understanding of what a national 'popular' cinema is. MLVs illustrate the importance of the linguistic factor in a definition of a national cinema, and their failure, beyond economic factors, cannot be separated from other cultural considerations, particularly at a time of audience hypersensitivity, given the novelty of dialogue. MLVs also show in an exemplary fashion that a national cinema is defined principally by its degree of intertextuality with the culture of its country, and in particular with its dominant narrative patterns. Playing on all the possible variations (director, technicians, actors, studio and location), MLVs only kept one immutable parameter: the story.

³⁷ René Jeanne and Charles Ford, *Histoire encyclopédique du cinéma*, vol IV, *Le Cinéma Parlant* (1929-1945), Paris, SEDE, 1958.



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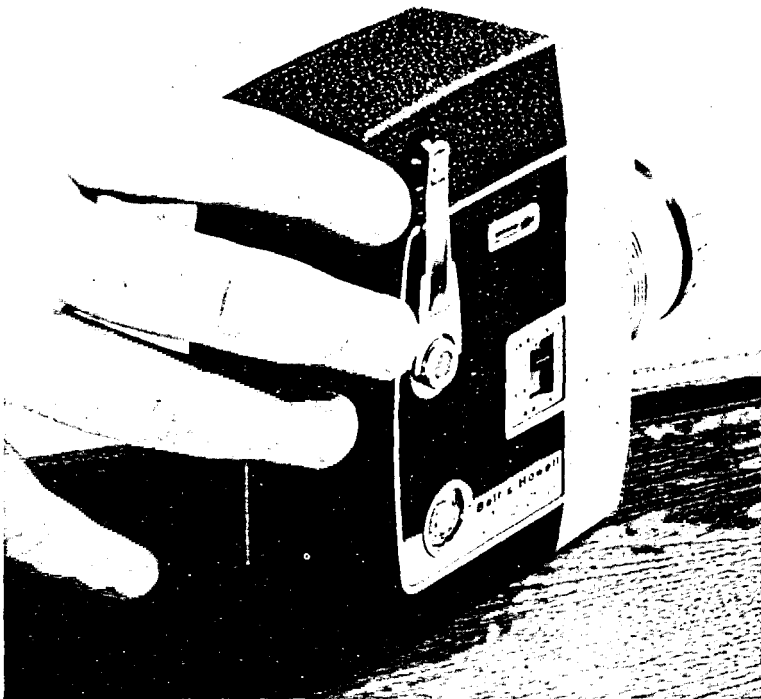
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TRADING DOWN: AMATEUR FILM TECHNOLOGY IN FIFTIES AMERICA

BY PATRICIA R ZIMMERMANN



The 1959 Bell and Howell Zoomatic 8mm camera: 'electric eye ease'.

WITH THE ONSLAUGHT of camcorders for the home and VCRs that let us devour as many tapes as we can afford to rent or buy, the diffusion of video technology to the consumer market postures as both a social and technological break with the past, a revolution overturning our consumption of entertainment so that we can more lasciviously enjoy the free marketplace of ideas and technology. Nearly every popular US magazine publishes ads from video camera and VCR

manufacturers extolling the simplicity of operating video equipment and the necessity of archiving family life. Clearly this diffusion is a contradictory moment, representing the commodification and privatisation of public activities like movie-going as well as dispersing the means of production (both of them, as we know, very complex questions within cultural studies). Yet it is important to reinscribe social relations and history into technology in order to locate it within the corporate matrix from which it developed.

Amateur media technology is, in fact, nothing new, with the still photography market opened to 'snapshooters' in 1888 with the invention of the Kodak Brownie. Indeed, one could claim that 1988 marks the centennial of amateur media making, if periodised by technology. Less than ten years later, amateur film technology was available, and its development not only parallels but intersects with and frequently dominates the development of film technology for more professional purposes. With the standardisation of 16mm as the amateur format in 1923, ending the proliferation of a multitude of perforation, gauge and technical designs from 1897-1922, amateur film-making became a hobby, mostly because companies like Bell and Howell, the inventor of the spring-driven, hand-held 16mm camera, and Eastman Kodak, inventor of cheaper reversal film, aggressively marketed cameras to the upper classes.¹ While the US military employed 16mm equipment during World War II, thereby suspending all consumer activities due to the lack of film and cameras², by the postwar period, amateur film-making boomed. A complex formation explains this growth: increased disposable income, a shorter working week, the emphasis on nuclear families and the home, the increase in credit availability, automation of factories, technological developments for streamlining equipment during the war, the growth of target marketing, the expansion of the suburbs and increased leisure time.³

But whether we analyse camcorders or Bell and Howell Filmos, how we determine what constitutes the notion of amateur media is of enormous consequence, for it suggests the contours and scope of the power relations involved, the limits and boundaries of production, and the operation of social norms. Needless to say, the distinctions between amateur and professional film are not only theoretically complicated, but also uncertain, with a large part of production, such as industrial film, clouding the more abstract distinctions between public and private spheres of production. It is vital to recognise that any definition of amateur film-making depends on a shifting formation of social, political, aesthetic and technological discourses and practices. However, it is possible to understand how technological development contributed and responded to more social definitions, since, unlike commercial cinema, amateur film-making seems to suggest first and foremost cameras. The period following World War II provides an intriguing site to investigate the nature of technological development of amateur cameras, since it evidences market growth and technological expansion into other

¹ On the earliest period of amateur film development and its relationship to consumer toys and commercial film patents, see Patricia R Zimmermann, 'Entrepreneurs, Engineers, and Hobbyists: The Formation of a Definition of Amateur Film 1897-1923', Bruce Austin (ed), *Current Research in Film*, vol 3, Norwood, New Jersey, Ablex Publishing Corporation, 1987, pp 163-188.

² For an analysis of how all amateur cameras and 16mm stock were commandeered by the US military during World War II and the resulting legitimisation of 16mm as semi-professional format, see Patricia R Zimmermann, 'Fighting With Film: 16mm Amateur Film, World War II, and Participatory Realism', forthcoming, *Current Research in Film*.

³ For a more extensive discussion of the discursive formation of amateur film in the '50s, particularly in relation to familialism, aesthetic propriety, Hollywood, and the structure of leisure time, see Patricia R Zimmermann 'Hollywood, Home Movies, and Leisure: Aesthetic Dissemination in Amateur Film', forthcoming, *Cinema Journal*.

⁴ Although 16mm had been standardised as the amateur gauge in 1923 by Eastman Kodak, Bell and Howell, and Victor Animatograph (earlier, and continuing throughout the '20s, gauges like 9mm and 7.5mm were available), it was not until after World War II that 16mm projectors, cameras and film had enough market penetration and interchangeability to make semi-professional, educational, and industrial film-making viable. The standardisation of 16mm during World War II had less to do with frame and perforation size than with notions of interchangeability, durability, and high quality projection – all attributes expanded on for war-time use.

⁵ See Richard Pollenberg, 'The Suburban Nation', in his *One Nation Divisible*, Harmondsworth, Penguin, 1980, pp 127-63; Marty Jezzer, *The Dark Ages: Life in the United States 1945-1960*, Boston, South End Press, 1982, pp 118-53; '30 Billion for Fun', in Eric Larrabee and Rolf Meyersohn (eds), *Mass Leisure*, Glencoe, Illinois, The Free Press, 1958, p 162; Alfred C Clarke, 'Leisure and Occupational Prestige', in Eric Larrabee and Rolf Meyersohn, op cit, pp 205-14; 'Leisured Masses', *Business Week*, September 12, 1953, pp 142-3; United States Department of Commerce, brochure,

product lines. From 1946 to 1962 that development demonstrates how power relations about access to media production reside in the material design of cameras themselves.

By the 1950s, amateur film technology was firmly positioned by the photographic and mass market press as a hobby – a hobby which could enable those with enough cash to acquire professional technical standards. Although World War II had standardised 16mm film into a semi-professional medium with limited commercial possibilities⁴, the enormous growth of the postwar leisure market provided a powerful marketing incentive and social context that situated amateur film technology as another manifestation of 'do-it-yourself' domestic ideology.⁵

The growth of interest in photographic hobbies prompted three distinct trends on the technological level. First, camera companies differentiated their product lines in order to capture a more diverse consumer market spanning the upper to lower classes. This stratification led to the development and diffusion of simplified 8mm equipment (first invented in the 1930s) lacking technical control as the new substandard gauge, and by extension contributed to the new 1950s definition of 'amateur'. Second, the differentiation of amateur cameras encouraged the idolatry of technical wizardry in imitation of Hollywood and US network television. Lastly, the entrance of foreign camera manufacturers displaced North American firms with their even simpler, automatic cameras. Differentiation, mimicry of technical mastery and more aggressive marketing of automated substandard 8mm film equipment designated the boundaries between professional and amateur film as technology, technical control and expertise.

With additional disposable income and a shorter working week, the expanding leisure market propelled Bell and Howell into a strong position in the photographic field, second only to Kodak. According to a 1956 Arthur D Little audit of Bell and Howell, compared to the war years, the company's net profits more than tripled from 1947 to 1956.⁶ Bell and Howell experienced economic gains and increased profit margins, based largely on more efficient and streamlined production methods that had been designed for war production. However, the major portion of this recovery occurred after 1950. In the late '40s, Bell and Howell's net sales fell from a wartime high of 21,930,971 dollars in 1945 to 13,238,116 dollars in 1949. In 1948 and 1949, due in part to a wartime 25 per cent excise tax on all photographic equipment, sales for the entire photographic industry in the United States dropped 40 per cent. After this tax was reduced to 10 per cent in 1949, sales began to escalate.⁷ From 1949 to 1952, net sales more than doubled from 13,238,116 dollars in 1949 to 28,665,915 dollars in 1952.⁸ During this period, the company initiated more aggressive marketing through research surveys to determine what kind of equipment families were interested in. According to the 1952 *Annual Report*, only six per cent of

US families owned amateur movie equipment. The two most frequently cited factors for not owning camera equipment were high prices and difficulty in operation.⁹ By 1952, Bell and Howell had established a record high in sales, a gain of nearly 29 per cent over the previous year. Following nationwide trends towards greater efficiency and automation, Bell and Howell had expanded its Chicago camera manufacturing plant by 26 per cent, instituted straight-line production methods, and, through a reorganisation of their camera casting process area, affected a 50 per cent reduction in process time.¹⁰ By 1956, general sales increased 125 per cent over 1947, with an 80 per cent increase in total photographic industry shipments.¹¹

Because Bell and Howell went public in 1945, it is easier to verify marketing shifts through a comparison of audits, letters, annual reports and magazine articles. Unfortunately, since figures from companies during the first two periods of amateur camera development (1897-1923, and 1923-1946) are either unavailable or are incomplete, it is difficult to accurately compare the business practices and activities of these firms across time except on the most general level. Consequently, more documentation is available for this period of expansion. This article utilises records from the Bell and Howell Corporate Archive – which include data and files on competitors although not with the completeness of its own activities – and analyses equipment advertisements from photography magazines to compare equipment.

The most important contributing factor to an upward financial trend was Bell and Howell's product diversification, which shifted its manufacturing emphasis from professional motion picture equipment to amateur, educational, industrial and institutional markets.¹² The company facilitated this diversification through a combination of development of new product lines and acquisition of existing firms. In 1949, the company began to expand across the information industry by selective purchase and the initiation of new lines: the development of microfilm equipment and its subsequent sales and distribution through the Burroughs Corporation; the initiation of microfilm production; the purchase of the Three Dimension company, a leading manufacturer of slide projectors, and the DeVry Corporation, the largest supplier of 16mm sound projectors to the military.¹³ By 1956, professional motion picture equipment represented less than three per cent of Bell and Howell's total company sales. This shift in manufacturing and marketing emphasis from professional motion picture equipment to the amateur, educational, industrial and institutional markets is indicated by the following table describing Bell and Howell's product mix which appeared in a 1956 auditing report¹⁴:

'The Do-It-Yourself Market', undated.

⁶ Arthur D Little 1956 Audit of Bell and Howell Corporation, Table IV, Bell and Howell Corporate Archive, p 22 and 33.

⁷ 1949 Bell and Howell *Annual Report*, p 10. See also 1946, 1947, 1948 *Annual Reports*, Bell and Howell Corporate Archive.

⁸ 1949 through 1952 Bell and Howell *Annual Reports*.

⁹ 1952 Bell and Howell *Annual Report*, Bell and Howell Corporate Archive, pp 18-9.

¹⁰ *ibid*, pp 4-5, 12.

¹¹ Arthur D Little 1956 Audit of Bell and Howell Corporation, Table X, p 34.

¹² 1952 Bell and Howell *Annual Report*, p 6; Jack Fay Robinson, *The Bell and Howell Company: The First 75 Years*, Chicago, The Bell and Howell Company, 1982, pp 84-92.

¹³ Arthur D Little 1956 Audit of Bell and Howell Corporation, p 2 and 1954 Bell and Howell *Annual Report*, Bell and Howell Corporate Archive.

¹⁴ Arthur D Little 1956 Audit of Bell and Howell Corporation, p 37.

BELL AND HOWELL PRODUCT MIX

<u>Total Sales</u>	<u>1950</u> <u>100%</u>	<u>1955</u> <u>100%</u>
8mm and 16mm cameras, silent projectors, and packages	32	27
Mainly still projectors, also tape recorders, hi-fi	0	13
Sound projectors and other equipment	47	22
Professional, Microfilm equipment, and film	19	16
Special military products	2	18
Bell and Howell Canada Lts	0	4

Military products accounted for the largest growth sector in this diversification plan. The production of military items had beneficial consequences for Bell and Howell when the space programme was initiated in the late 1950s, with the company a prime contractor for space instrumentation.

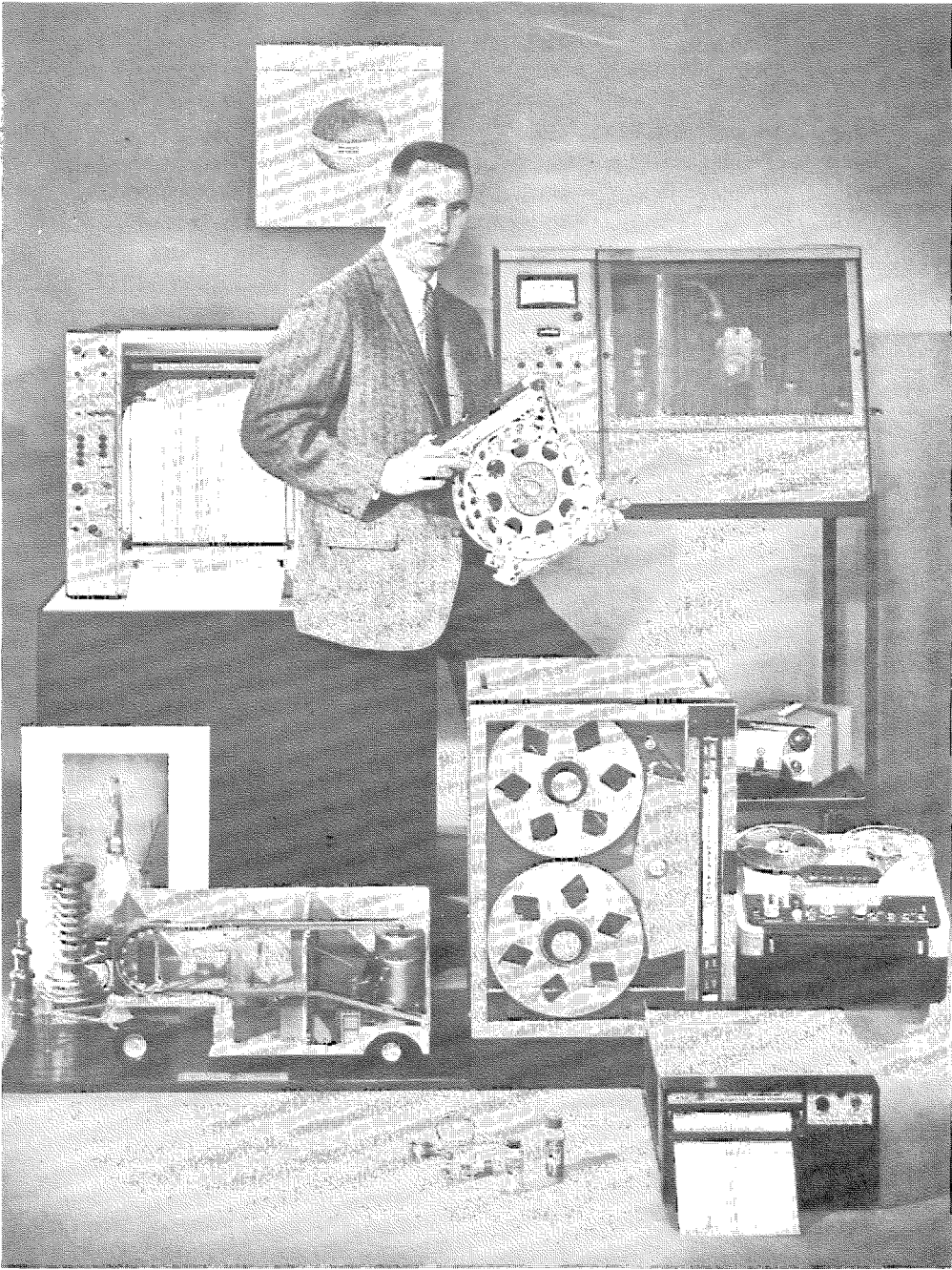
While it is beyond the scope of this article to assess the rapid and massive expansion of the 16mm educational and industrial film market, it is important to note the directions many camera and projector companies assumed in the postwar period as they developed 16mm as a semi-professional medium. The resulting ranking of 16mm equipment as top-of-the-line and 8mm as amateur reflected these changes. For example, the number of projectors in schools increased by more than tenfold in the years following World War II.¹⁵

This market grew rapidly during the 1950s, which may account for the 'professionalisation' of amateur 16mm equipment. By 1955, 61 per cent of all camera sales were in the non-luxury market of business, science, industry, government and education, according to a Bell and Howell press release issued that same year.¹⁶

Diversification was most apparent in the development of new product lines for amateur motion pictures. With the expansion of working and middle-class markets for leisure goods and a cultural fascination with 'creative' hobbies, Bell and Howell responded to these demographic shifts in the complexion of leisure time by diversifying its amateur movie equipment. The stratification of equipment that targeted cameras towards specific income groups was significant for Bell and Howell, since it changed the company's profile as a producer of equipment for the small, professional market and rather elitist, upper-class amateur luxury and speciality market into a formidable presence in the mass

¹⁵ Paul A Wagner 'What's Past Is Prologue', in Film Council of America, *Sixty Years of 16mm Film 1923-1983; A Symposium*, Des Plaines, Illinois, Film Council of America, 1983, p 12. This book contains numerous articles on the use of 16mm for industry, education, church, community groups and libraries. For a view of educational films in 16mm generated during this period of the '50s, see F Dean McCluskey, 'Public Schools', pamphlet, Evanston, Illinois, Film Council of America, 1954.

¹⁶ Bell and Howell Press Release, January 27, 1955, Bell and Howell Corporate Archive, pp 1-2.



Diversification through militarisation: illustration from the Bell and Howell 1960 Annual Report.

¹⁷ Arthur D Little 1956 Audit of Bell and Howell Corporation, p 3.

¹⁸ *ibid*, p 42.

¹⁹ *ibid*, pp 43-4. For a discussion of how Bell and Howell saw the introduction of lower priced equipment as a way to counter increased foreign competition, see 1954 Bell and Howell *Annual Report*, p 3 and 9.

²⁰ Arthur D Little 1956 Audit of Bell and Howell Corporation, p 66; 'Bell and Howell: A Case Study', *Tide*, July 1, 1949, pp 23-7.

marketing of amateur equipment. Although Bell and Howell continued to be dependent on the growth of the luxury camera market that relied on high levels of disposable income, its diversification provided a hedge against sudden economic downturns in amateur photography and cinematography.¹⁷

Until the late '40s and early '50s, Bell and Howell amateur motion picture equipment was positioned as a top-of-the-line item, aimed at a wealthy clientèle. By the late '40s, the company initiated a policy of 'trading down', that is, producing less expensive lines of goods that would attract a lower income market. Between 1947 and 1954, demand for 16mm equipment decreased as lower priced and more competitive 8mm equipment, much of it from foreign manufacturers, captured a larger share of the amateur cinematography market. During this period, camera shipments increased 45 per cent, demonstrating the market effectiveness of this product line diversification scheme.¹⁸ Lower priced 8mm cameras, reintroduced by both Kodak and Bell and Howell in 1952, substantially widened the market for amateur movie equipment, since 8mm equipment was simpler to operate and much cheaper to use. 8mm was now framed as the new substandard gauge, the gauge designed for families. From 1947 to 1954, 8mm camera sales increased by 62 per cent, while 16mm camera sales decreased by 43 per cent.¹⁹

During this period, Bell and Howell's main competitors in the amateur motion picture market were Kodak, Revere, Keystone and Bolex, a Swiss camera manufacturer.²⁰ All of these companies diversified their amateur camera lines from a full range of 16mm cameras to technically simplified and cheaper 8mm cameras. By analysing the selection process involved in 'trading down' amateur movie technology as evidenced in equipment ads, it is possible to determine how the technology itself was designed for hobby rather than commercially competitive usage and possibilities.

A point needs to be raised about the nature and limitations of sources employed in the following analysis. While Bell and Howell archival material reveals the company's marketing strategies in some depth and audits and corporate records reveal the structure of the market in this era, parallel data on Kodak, Revere, Keystone and Bolex was not available. Therefore, this portion of the discussion will not compare the corporate strategies of these manufacturers but will analyse the public presentation of equipment lines in advertisements from popular photography magazines. While this sort of source is extremely limited as evidence of a manufacturer's intentions, marketing strategies, or market penetration, it does provide a general outline of the technological contours that developed within the amateur motion picture leisure market during this period.

Manufacturers began to differentiate amateur cameras according to how much technical skill, expertise and manipulation they required during operation, thus segmenting amateur producers and the amateur consumer market according to technical classifications of skill. By the

1950s, this stratification of film producers signified yet another manifestation of the social translation of an ideology of professionalisation, where the hierarchies of work were translated into hierarchies based on consumption of technically complicated machines like 16mm. The following table of equipment product lines for Revere, Kodak, and Bell and Howell, which originally appeared in photography magazines, demonstrates how this diversification hierarchalised equipment through expense and technical complexity²¹:

²¹ Revere Camera Ad, *Photography*, August 1953, p 97; Bell and Howell Camera Ad, *Photography*, July 1953, p 94; Kodak Camera Ad, *American Photography*, May 1951, p 302.

COMPARISONS OF CAMERA DIVERSIFICATION COSTS

Revere	Dollars
Revere 84	
8mm Turrent, 3 lenses	122.50
Revere 80	
8mm, drop-in loading, three speeds	97.50
Revere 50	
drop-in loading	49.50
Bell and Howell	
The Filmo 70DL	
'The Cameraman's 16 and the choice of advanced amateurs and professionals'	365.00
Exciting 16s	
with magazine loading	174.00-219.00
Low Cost 8s	
134V	
172A (with turrent cartridge loading)	Price dependent on market fluctuations
172B (with cartridge loading)	
Kodak 'There's a Kodak movie camera just right for you.'	
Cine-Kodak Special	
Most versatile, every control needed for special effects, fades, dissolves, mask shots, multiple exposures.	898.50
Cine-Kodak Magazine	
16mm magazine loading	192.50
Cine-Kodak Magazine 8	
Slow motion capability, telephone lens	147.50
Cine-Kodak Reliant 8mm	
Slow motion capability, no focusing	97.50
Brownie 8mm	
'The simplicity and economy of snapshooting'	47.50

Most of the amateur camera manufacturers differentiated their cameras by reducing the film gauge and simplifying the technology. Thus, the top-of-the-line models simulated professionalism because they permitted control over exposure and focusing, while the bottom-of-the-line products were consummately amateur because they were technically simple. Advertising in photography magazines identified the luxury cameras, like the Bell and Howell Film 70DL and the Cine-Kodak Special, as professional because they had more controls than 8mm

models, and used the now standard 16mm roll film that had to be threaded in the camera by hand rather than inserted via a pre-loaded cartridge magazine.

As the customer's ability increased, s/he could 'trade-up' through the purchase of ever more complicated and expensive equipment. This hierarchy of camera design positioned film-making expertise as a passport towards further 'professionalisation' of leisure. In this sense, the Revere 50, the Bell and Howell 172B, and the Kodak Brownie 8mm functioned as training cameras to acquaint the amateur movie-maker with film technology and aesthetics. Indeed, the demarcation line between professional and amateur here was almost exclusively financial, if not illusory: one could, if one were in the right upper income level, purchase the trappings or technical illusion of 'professionalism' with an expensive camera. Although this diversification of camera lines was designed to attract the disposable income of middle and working class groups, it also instituted a class structure based on technology that was defined by cost, technical control and film gauge. Note how Bell and Howell described the Filmo 70DL in this copy from an ad which ran in the August 1953 issue of *Photography*:

*Precision equipment... worthy of your experience. This is the 16mm camera that will take you just as far as you can go in photography. . . . These . . . innumerable built-in features . . . make the 70 the master of all 16mm cameras.*²²

Another aspect of this domination of amateur film technology by professional standards of technical control and manipulation was its imitation of Hollywood special effects. With the advent of television and the postwar decline in movie attendance, Hollywood changed its marketing emphasis towards technical novelties, including 3-D. In 1953, Twentieth Century Fox inaugurated Cinemascope, widening the image beyond the usual 35mm aspect ratio.²³ Two years later, both Bell and Howell and Vitascope created wide screen apparati that used anamorphic lenses to produce an image three times wider than its height. Bell and Howell's Filmorama sold for 760 dollars, while the Dutch-manufactured Vitascope was priced at 125 dollars. The point of these wide screen imitations was to make amateur films resemble and evoke Cinemascope's aspect ratio, so that, as a 1955 *Popular Science* article on wide screen argued, more peripheral detail was visible to give 'the sense of three dimension'.²⁴

By the late 1950s, zoom lenses were also available for amateur cameras, as a means by which the amateur could recreate television aesthetics within the home. Later, an ad for the DeJur camera in a 1962 *Popular Photography* advertisement proclaimed that even the lowly amateur could obtain 'professional style pans' and 'television style zooms'.²⁵ In this respect, amateur film technology and its array of special attachments functioned to turn hobby production into a rehash

²² Bell and Howell 70DL Ad, *Photography*, August 1953, p 86.

²³ Robert Sklar, *Movie-Made America*, New York, Vintage Books, 1976, pp 283-5.

²⁴ Herbert O Johansen, 'Wide Screen Movies Come to the Home: Filmorama', *Popular Science*, February 1955, pp 225-8.

²⁵ DeJur Camera Ad, *Popular Photography*, April 1962, p 107.

of technical spectacles. This marketing trend framed amateur cameras as do-it-yourself gadgets, sophisticated technical toys reminiscent of the earlier period of amateur film from 1897 to 1923 where the line between amateur cameras and toys was blurred.

The infusion of foreign-made cameras demonstrated just how effective the ideology of professionalism was in attracting consumers. The definition of amateur film assumed an even more technical character, since cameras became more and more simple to operate in response to foreign competition, eventually dissolving the hierarchy based on technical control into a form of amateurism that could be even more spontaneous because it required minimal manipulation and control. Increased automation of amateur cameras assisted their insertion into nuclear families because it highlighted both ease of operation and the acquisition of 'naturalness'.

From 1950 to 1955, Bell and Howell's principle competition came from the Swiss-made Bolex, which held an 80 per cent market share of all amateur movie camera and equipment imports. German amateur camera manufacturers export volume also increased tenfold during this period.²⁶ According to a specially commissioned Bell and Howell study, European income levels at this time did not reflect a broad-based market for luxury leisure items.²⁷ These demographic factors had two important effects on amateur film technology at this time. The first was that it created an incentive for German and Swiss manufacturers to export; the second was that the European manufactured cameras were designed to appeal to the advanced amateur and semi-professional, since the European amateur market was tooled up primarily for upper-class customers with disposable leisure incomes. In addition, unlike North American mass-produced amateur cameras, these imports were produced through hand assembly, which promoted mechanical excellence, finish, precision and craftsmanship, attributes traditionally associated with professional cameras in both Europe and the United States.

However, Bell and Howell and Kodak dominated mass distribution channels in the United States, and their expertise in diffusing their equipment lines to retail outlets provided a significant hedge against more specialised foreign competition until the late '50s. In response to the expanding market for leisure goods and the demographic shift towards the suburbs and shopping centres in outlying areas, Bell and Howell gradually changed its distribution system from concentration on specialised dealers in major metropolitan areas towards the photographic departments of national retail stores such as Sears, Roebuck and Montgomery Ward.²⁸ This marketing change increasingly situated advanced amateur equipment within speciality stores in declining downtown areas and diffused lower priced lines into the mass market retail chains which were capturing the largest volume of suburban leisure dollars. Thus, the cheapest, simplest and most 'amateur' equipment was designated for the suburbs, while more professional 16mm equipment was marketed in downtown areas.

²⁶ Arthur D Little 1956
Audit of Bell and
Howell Corporation,
p 74.

²⁷ *ibid.*

²⁸ *ibid.*, pp 48-54.

²⁹ James D Tarver, 'Suburbanization of Retail Trade in the Standard Metropolitan Areas of the United States, 1948-1954', in Eric Larrabee and Rolf Meyersohn, *op cit*, pp 195-205.

³⁰ 'Percy Profile', TS, December 1959, Bell and Howell Corporate Archive, p 12 and 13.

³¹ 'Investors Forum: WGN-TV Suggested Material for Leisure Time Discussion', TS, November 1961, Bell and Howell Corporate Archive, p 3.

³² 'Percy Profile', *op cit*, p 5.

³³ *ibid*, p 6.

³⁴ 'Investors Forum: WGN-TV Suggested Material for Leisure Time Discussion', pp 7-12.

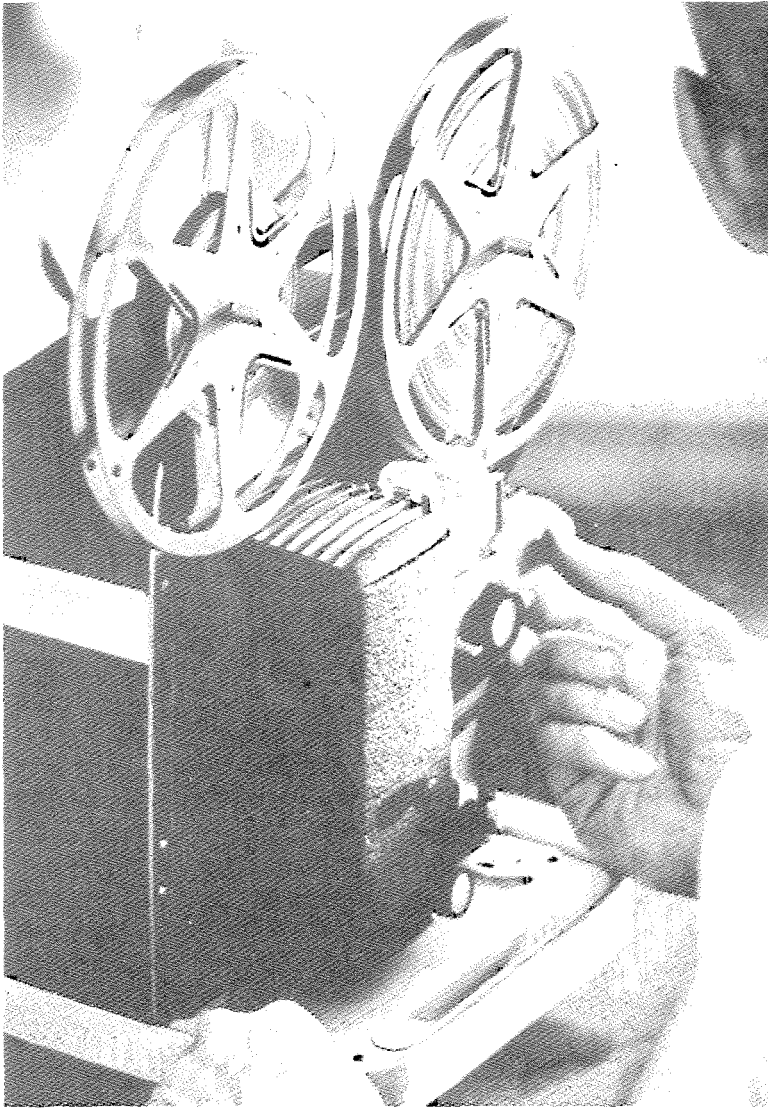
³⁵ 1961 Bell and Howell *Annual Report*, pp 5-8.

Bell and Howell's move towards the suburbanisation of retail trade was part of a national trend in the 1950s, when suburban outlets experienced a higher rate of gain than central city shops.²⁹ Thus, Bell and Howell, unlike its foreign competitors, was able to distribute its diversified lines through retail channels that were increasingly located in the areas of the most dramatic demographic expansion.

Despite this strategy, by the late '50s foreign import amateur cameras undercut Bell and Howell and Kodak with their lower prices, increased automation and greater ease of operation. By 1959, foreign sales in the United States increased by five per cent in one year alone.³⁰ This influx of foreign-made amateur cameras was part of a larger trend of an upturn in the market for photographic products. By 1961, the leisure market for photographic goods was estimated at 700 million dollars per year.³¹ Between 1950 and 1958, the size of the amateur photo market exploded by 112.5 per cent, the use of 8mm film cameras swelled by 41 per cent, and shipments of 8mm cameras increased by 201 per cent.³² In response to the large market share Japanese automatic cameras had obtained in this rapidly expanding market, Bell and Howell once again switched its manufacturing emphasis from technical control towards semi-automatic devices: the remote control Explorer slide projector; the three lens turret electric eye Perpetua 8mm camera; the self-threading Auto-load projector; and the Infallible electric eye still camera.³³

As a result of the influx of simplified Japanese technology, sales of amateur cameras dropped to less than 50 per cent of Bell and Howell's total by 1961. To cushion the drop, the company moved into microfilm and the expanding audio-visual educational market³⁴ and initiated a number of offshore licensing agreements to take advantage of lower labour costs in other countries, most notably with the Rank Organisation in the UK. In response to these imports and its own declining sales, in 1961 Bell and Howell acquired a 49 per cent equity of Japan Cine Equipment Manufacturing Company, formerly a wholly owned subsidiary of J Osawa and Company Limited, a Japanese distributor of Bell and Howell products, in order to compete in the Japanese retail market.³⁵ This move achieved only limited financial success. Eventually, foreign competition prompted Bell and Howell to produce more automatic and less mechanically controllable amateur cameras; it pushed the company more and more into international manufacturing, increased its emphasis on its own economic diversification, and stimulated its interest in the lucrative and growing business information market. The entry of Japanese manufacturers with even more mass produced, automated, 8mm cameras signified the end of US domination over the manufacture of amateur film technology and the end of any fluidity between professionals and amateurs, with the latter largely confined to low-tech equipment.

By the time Bell and Howell had begun to disengage itself from the amateur camera market in 1962, the expanding leisure market, the do-it-

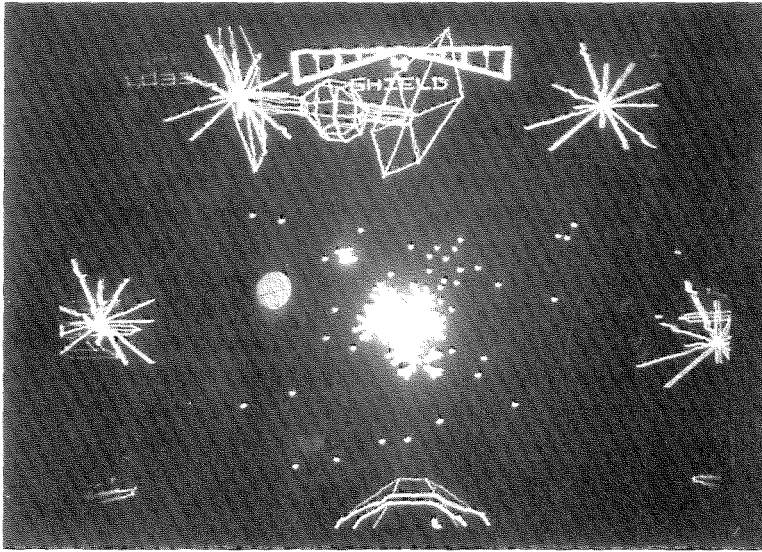


The 1959 Bell and Howell Lumina 8mm projector: 'threads automatically'.

yourself movement, product differentiation based on technical control, increased automation, and the 'substandard' gauge of 8mm (as compared to 16mm, which had limited professional possibilities in television and industrial films) coordinated to position amateur film-making as a consumer activity within the home rather than as a medium for access into other forms of media production. These factors controlled and marginalised amateur film-making as a hobby, a form of play with technology in simulation of professional labour.

ELECTRONIC AND COMPUTER GAMES

THE HISTORY OF AN
INTERACTIVE MEDIUM,
BY LESLIE HADDON



Explosions in hyper-space: *Star Wars*, by the highly successful Atari company.

INTERACTIVE MEDIA have been with us for years. Educational computer software is presented as an alternative to books and to televisual material. A number of firms currently offer interactive video for training purposes. For some time there have been aspirations to translate written fiction into electronic interactive texts. Since any form of reference manual can be presented in software form, some producers even have talked of the product configuration whereby a microwave oven could show a video of the cooking sequence prior to use. Whatever the 'success' of particular products, a range of producers are currently making considerable efforts to develop these new technological forms. Both the nature of the resulting texts, and their conditions of production and consumption, are worthy of examination. This article examines one branch of this new media which already has a history spanning two decades: interactive games.

Games have been by far the most significant manifestation of interac-

tive media to date. by 1984, home computer software sales, consisting mostly of games, were about a quarter of the value of recorded music sales in Britain.¹ Current computer game software sales in the UK, once again, are about a quarter of those of recorded video.² Thus, we are talking about a substantial industry. If we look back further, to the time when video games were at their peak in 1982, estimates place worldwide home sales of video games at between 2 and 3.8 billion dollars. The arcade game business at that time was even larger, grossing 8 billion dollars. By comparison, contemporary pop music had international sales of 4 billion dollars, and Hollywood films brought in 3 billion dollars of income.³ Revenue from the game *Pac-Man* alone was estimated to exceed that from the cinema box-office success *Star Wars*.⁴ In 1981, the home video console from the most successful game company, Atari, accounted for 25 per cent of the sales of what was by then its parent – the media giant, Warner Communications.⁵

This profitability meant that games producing firms had considerable resources to devote to research and development. Atari hired some of the top researchers from the computer and semiconductor fields, bought up patents, and embarked on basic research in a range of fields. Consequently, a range of spin-offs followed which benefited other interactive media – for example, the interactive video used for training purposes. In addition, games were influential as icons for interactive media generally, as well as through contributing to pop videos, films, and TV commercials.⁶

Games also attracted a range of criticisms, some of which relate to qualities shared with other interactive media. For example, it has been argued that the particular experience of these electronic or computer environments is more intense than watching TV. Other criticisms have been based on features specific to the history of this entertainment form. One of the most prominent critiques has been that games have been masculine texts. Certainly, we would want to know why the first form of interactive media to attract a wide audience has developed a greater male following.⁷

Interactive Technology: Some Definitions

The decision to use the term 'interactive media' reflects the fact that what is involved is a family of related technological forms. Games span a range of products so that we cannot simply talk about 'computer games'. One consideration here is that the games technology could itself be constructed utilising more than one circuit design, and even using different components. Another factor is that even those media which have similar underlying technical structures can be represented very differently. In the case of games, both video games machines and home computers eventually adopted microprocessor technology. The former hardware products were not conceptualised in terms of a computer,

¹ Keynote Report, *Records and Tapes*, London, 1986, p 1 and Keynote Report, *Homecomputer Software*, London, 1985, p 11.

² Mel Couchner, 'Software Apocalypse – Now', *Computer Trade Weekly*, December 15 1986, p 8.

³ John Condry and Douglas Keith, 'Educational and Recreational Uses of Computer Technology: Computer Instruction and Video Games', *Youth and Society*, vol 15 no 1, p 103, September 1983, pp 87-111.

⁴ Jon Bing, 'The Electronic Games Gambit', *Impact of Science on Society*, vol 37 no 4, October-December 1982, p 36.

⁵ Peter Nulty, 'Why the Craze Won't Quit', *Fortune*, November 15 1982, p 114.

⁶ Gillian Skirrow, 'Hellivision: An Analysis of Video Games', in Colin McCabe (ed), *High Theory/Low Culture: Analysing Popular Television and Film*, Manchester, Manchester University Press, 1986, pp 115-42. This piece contains by far the most sophisticated analysis of games as texts currently published.

⁷ An example of a recent citing of games as masculine texts is

while the latter were seen in that light. If the planned interactive compact disc technology takes on games, we may once again drop the 'computer' reference in relation to this medium.

It is important to be sensitive to this fluidity of the technological structures and to the flexibility with which we can label them. In this instance, we can see that it might be slightly misleading to overstress parallels between the experience of games and that of computing generally – as some commentators have done. On the other hand, to categorise games as simply an extension of television – which is the path other analysts have taken – fails to do justice to the complex history of these cultural products.

This article aims to chart the various lineages through which games have evolved, focusing initially on their development in the US, and then turning to the British context. It is important to understand that there is more than one origin to games, and that there are networks of transfers between the different strands. Only then can we appreciate some of the nuances of the current manifestation of this media form: 'computer games'. The account focuses mainly on the conditions of the production of games, including an examination of the changing technical form of this medium and of the factors influencing textual features. Some outline of the conditions of consumption, which involves noting the debates about games, is essential if we are to understand the relation between gender and games-playing. The following history examines four different games products:

1) The First Computer Games. The earliest games originated in US computing institutions in the early 1960s. Since the computers of the '50s were represented as being very serious machines to be used mainly for calculations and administrative work, there is the question of how it was possible for a form such as games to have come into existence in such a location. Additionally, we would want to know how games diffused both within the computer establishment generally and among American and British microcomputer hobbyists from the mid-'70s. These enthusiasts were to play an important role in the later establishment of computer games.

2) Arcade Games. The term 'video games' can refer generically to two types which appeared as commercial products from the early 1970s: the coin-operated arcade game, and the home machine. Turning first to the development of arcades in the US, how did games transfer from the computer establishments to this new setting and what were the effects of locating in this milieu? This was the first games product to be discussed as a medium, and here we find many of the early critiques, including those on the issue of gender.

3) The Home Video Games Machine. This vehicle for games had a separate origin as an extension of TV. This product provided a paradigm of the domestic 'games machine' which was later appropriated by the home computer. The video games machine, when in the form of a programmable console, differed from the later home computer mainly in its

lack of a keyboard and programming language. These video consoles constituted a precursor to the home micro by creating a general hardware-software division. One issue of interest is the question of how games were seen as a route towards a machine capable of handling a range of interactive media forms.

4) Home Computer Games. Manufacturers of home microcomputers have remained ambivalent about the games which simultaneously sustain sales yet thwart producer aspirations for these machines. Under these conditions, why did games emerge to such predominance at all? While not predicting the future of games, we can examine tensions around the role of games in relation to this product and possible trajectories in which they may develop.

The First Computer Games

In the late 1950s and early '60s, 'Computer Science' was in the process of its construction as an academic discipline.⁸ MIT introduced the first courses on computing for undergraduates in 1959, and set up an 'Artificial Intelligence' department of researchers. A military agency had been providing funding for computer development since the early days of the space programme. When this programme was transferred to the civil National Aeronautics and Space Administration, NASA decided to increase its support for computing and, in particular, for projects on basic research. The new AI department was able to deploy these funds with a considerable degree of discretion and employed the first enthusiastic students emerging from MIT's new courses. Meanwhile, the university department was developing a close relationship to the young company DEC, which was at the forefront of the newly emerging minicomputer industry. DEC provided MIT with a free minicomputer and any assistance that was requested. In return, the minicomputer company benefited from MIT research and advice, received a range of free programs from the AI department, and eventually recruited a number of staff from this source.

Within these institutional arrangements, the department was in the process of developing new forms of computing. At that time, the only model of computing was the batch-processing system dominated by IBM. Anyone wanting access to mainframes had to submit programs to operators and pick up the results later. Using a small research computer and a DEC minicomputer, the MIT unit explored a more direct style of computing with these machines, whereby users could receive immediate feedback from their efforts. MIT researchers developed a range of facilities to support this new type of 'real time' computing, formulating some of the principles by which microcomputers were later to operate.

Even prior to the new MIT courses, a male community had evolved in the university's model railway club, where members used their technical expertise to construct and investigate systems: particularly tele-

⁸ This section is mainly based on: Steven Levy, *Hackers: Heroes of the Revolution*, Garden City, New York, Doubleday, 1984; Stewart Brand, 'Spacewar: Fanatic Life and Symbolic Death Among the Computer Bums', *Rolling Stone*, December 7 1972; and Paul Freiberger and Michael Swaine, *Fire in the Valley: the Making of the Personal Computer*, Berkeley, Osborne/McGraw-Hill, 1984.

phone and railway ones. These students continually tried to perfect new features for their systems. The set of values operating in this culture led them to develop their own terminology, the key concept in which was the 'hack'. This term came specifically to refer to a stylish technical innovation undertaken for the intrinsic pleasure of experimenting – not necessarily to fulfil some more constructive goal. From this concept, the community's members later defined themselves as 'hackers'. The computer system in the AI department soon became their new object of interest. In the course of displaying their programming skills, the hackers explored and enhanced the capabilities of these new machines.

As 'hacks', projects which tested and demonstrated the computer's abilities were often of little use in themselves. For example, these enthusiasts worked on programs to play chess and to solve puzzles generated by a form of solitaire. This approach to computing was very different from the traditional 'serious use' of the machine. Rather than treating computers as mundane tools, the hackers played with the machines as if they were toys. While this was a heresy to many of their contemporaries, the AI managers regarded these projects as vehicles for learning about this new form of computing. Indeed, there were tangible spin-offs as these programmers wrote and improved the operating systems for their first machine and DEC's minicomputer, as well as supplying other programs which would have been very costly to produce commercially. More particularly, the hackers produced innovatory software to handle real time computer graphics and later contributed considerably to the development of time-sharing.

The first games were just such non-utilitarian, exploratory projects. Demonstration programs already existed which created visual effects. One such program controlled a row of flashing lights so that they simulated the motion of a ball in the game of table tennis. Another project entailed the construction of a maze on a VDU in which a mouse would search for cheese. One hacker, Steve Russell, was searching for a 'hack' which would be even more visually stunning when he had the idea for a computerised space battle:

I had just finished reading 'Doc' Smith's 'Lensman' series. He was some sort of scientist but he wrote this really dashing sort of science fiction. The details were very good and it had excellent pace. His heroes had a strong tendency to get pursued by the villain across the galaxy and have to invent their way out of their problem while they were being pursued. That sort of action was the thing that suggested 'Spacewar'. He had some very glowing descriptions of spaceship encounters and space fleet manoeuvres.⁹

In the first version of *Spacewar*, two spaceships engage in battle, using torpedos to shoot at each other. The program operated in real time, which meant that the graphics reacted instantly to control. Any motion that was initiated, such as turning or firing, operated while the player chose the next move. In this sense, action was continuous and there was

⁹ Stewart Brand, *op cit*, p 34.

no pause to stop and plan. Once *Spacewar* was presented to the hacker community, others added new features such as gravity effects and details of solar systems. They also developed the first computer game joy-sticks to control the motion.

Russell went on to note:

One of the important things in Spacewar is the pace. It's relatively fast-paced, and that makes it an interesting game. It seems to be a reasonable compromise between action – pushing buttons – and thought. Thought does help you, and there are some tactical considerations, but just plain fast reflexes also help.

Here we can see how Russell had translated the fast pace, the 'action', of a written narrative into a computerised form, calling on physical reflex as well as strategy. Yet even the author of *Spacewar* tacitly acknowledged another influence in the construction of the game. Russell later reflected that his product was 'really' an elaborate game of pinball. As we shall see, this parallel was picked out by other commentators and was to be important in the subsequent history of the game.

Spacewar fitted into the pattern of acceptable projects in the MIT community. One approach to handling interactive graphics on a time-shared computer was even called 'Spacewar Mode' in honour of its origins. As a member of the AI staff at that time later recalled:

The first years of Spacewar at MIT were the best. The game was in a rough state, students were working their hearts out improving it, and the faculty was nodding benignly as they watched the students learning computer theory faster and more painlessly than they'd seen before. And a background of real-time interactive programming was being built up that anybody in school could draw on; one of the largest problems in the development of the game was how to talk to a computer program and have it answer back.¹⁰

The Diffusion of Genres

There were soon to be other variations on the battle and shooting theme. *Star Trek* became perhaps the best known game on a mainframe computer. Yet, even when alternative types were developed, the tastes of programmers in the male-dominated computing field continued to be reflected in these texts. For example, simulations had been one of the earliest uses for computers – especially simulations of battles for military purposes. *Lunar Landing*, which became widely available on mainframes, was once again located within a space setting. The game simulated control of a spacecraft approaching the moon.

Mathematically-based programs were also popular. One such program, elaborated by the original MIT hackers, was *The Game of Life*. This simulated ever-changing communities of 'cells' as they formed pat-

¹⁰ Cited in *ibid*, p 35.

¹¹ Gillian Skirrow, *op cit*, provides a history of the adventure genre which traces its features back to previous texts.

terns over 'generations'. Another well-known genre originated in *Adventure*. Appearing much later, in 1976, this computer game drew on the structure of fantasy war-gaming and, in particular, on the *Dungeons and Dragons* interests of some programmers. The player directed an explorer through an underground world. There, the protagonist fought off enemies and overcame obstacles through clever tricks in order to find some treasure. The latter genre became, like *Spacewar*, a cult game in computer centres. On the home computer, this adventure format was later to provide the main alternative to the fast-action, 'real-time' form adopted by video games.¹¹

In the intervening years between the first *Spacewar* and the advent of the micro, games became an established feature on larger computers. This was due both to programmers' interest in game-playing and the usefulness of games to computer manufacturers. In 1962, MIT put *Spacewar* on show to the general public. DEC requested a copy, and *Spacewar* was soon supplied to all their clients. Apart from their diagnostic utility in checking that machines were in order, the games were also used by the DEC salesforce as demonstration pieces. *Spacewar*, and later games, showed the accessible and friendly face of the machine. Later, when graphics capability became an important consideration, games were often used to demonstrate the sophistication of the computer. By the 1970s, games had become established as a 'traditional' program.

Games and Hobby Micros

As with the early hackers, the electronics and computing hobbyists who built and bought the first microcomputers in the mid-'70s sought out ways to show this black box in operation. The first demonstrations involved controlling sound, and these were soon followed by programs which produced a display of flashing lights. Games played the same role, providing a manifestation of the micro in action and illustrating the computer's capabilities. In fact, games became one of the first forms of software to be sold as a product. Hobbyists converted the classic mainframe and minicomputer games to the smaller machines, as well as copying the arcade favourites.

In addition to this demonstration role, games also constituted a new type of programming challenge: that of squeezing the complex structures designed for minis and mainframes onto the small memory of a micro. Meanwhile, games were still vehicles for learning about the machines. Programs such as *Spacewar* could be justified as an exercise in controlling animated computer graphics, while adventure games involved planning and familiarity with the structure of databases. Moreover, it was possible to program and run games even with very limited equipment.

An early reporter on this microcomputer field, a hobbyist himself,

Well, because you could program them yourself, you could modify them yourself, you could experiment with them. You could write a 'Lunar Landing' which was a very popular game. The first puzzle, of course, was to crack the algorithm and play the game. And the next one was to say, 'Well any fool can play this game. How can I improve the algorithm? How can I make it run in real time?'¹²

Finally, these male hobbyists also valued games playing for its own sake regardless of the particular narrative content of these products. Games were puzzles within a computerised environment. As such, they were somewhat like programming itself. Thus, early computer magazines presented games playing as an acceptable activity – a source of relaxation in the midst of programming. Their readers were not only to provide a market for the new computer game products. They were also to be a legitimising force, pointing to the potentially constructive side of this software genre in contrast to the commentators who were later to characterise games more negatively.

Arcade Games

Nolan Busnell was mainly responsible for the transfer of games to the arcades.¹³ An engineer who had played the original computer games as a student, Busnell had also worked in amusement parks. When the price of chip technology fell sufficiently he attempted a coin-operated version of *Spacewar*. Developed in 1971, *Spacewar* was not an immediate commercial success. But a subsequent effort devised with the help of a colleague – the electronic table-tennis game *Pong* – proved very popular. With this product, Busnell and his colleagues founded the Atari company, a firm which was to become a major force in the new games industry.

Other companies entered this new market very quickly. Within a few years there were 30 manufacturers of coin-op video games, reducing Atari's market-share to 10% by the end of 1973. But by the late '70s, an Atari which was now supported by Warner Communication funds came to dominate the industry again, producing both for the coin-op and home video game markets. Following the introduction of *Space Invaders* in 1979, the arcade game reached new heights of popularity. A measure of this can be seen in the fact that between 1979 and 1981 sales of game machines rose from approximately 40 to 500 million dollars.¹⁴ By this time, coin-op games had become an international phenomenon. Their proliferation and profitability increasingly caught media attention, provoking the considerable critical comment outlined below.

Amusement park owners adopted electronic games as part of a wider attempt to shed the sleazy image of the arcade. These managers felt that the new product would help to introduce more respectability to the

¹² Interview from the author's research.

¹³ For the history of arcade developments see Tekla Perry and others, 'Video Games: the Electronic Big Bang', *IEEE Spectrum*, vol 19 no 12, December 1982, pp 20-33; Craig Kubey, *The Winners Book of Video Games*, London, W H Allen, 1982; John Price, 'Social Science Research on Video Games', *Journal of Popular Culture*, vol 18, no 4, Spring 1985, pp 111-125; Peter Bernstein, 'Atari and the Video Games Explosion', *Fortune*, vol 104 no 2, July 1981, pp 40-46; Judith Larsen and Everett Rogers, *Silicon Valley Fever: Growth of High Technology Culture*, London, Unwin, 1984; Sidney Kaplan, 'The Image of Amusement Arcades and the Differences in Male and Female Video Game Playing', *Journal of Popular Culture*, 1983, pp 93-98; Sue Smith, '“Coin Detected in Pocket”: Videogames as Icons', in C Geist and S Nachbar (eds), *The Popular Culture Reader*, Bowling Green, Bowling Green University Popular Press, 1983, pp 145-151; Aaron Latham, 'Videogames Star Wars', *New York Times Magazine*, October 25 1981, pp 100-112.

¹⁴ Eric Egli and Lawrence Meyers, 'The Role of Video Game Playing in Adolescent Life: Is there Reason to be Concerned?', *Bulletin*

¹⁵ See Terri Toles, 'Video games and American Military Ideology', in Vincent Mosco and Janet Wasko (eds), *The Critical Communications Review, vol III: Popular Culture and Media Events*, Norwood, Ablex, 1985, pp 207-223; Nancy Needham, 'Thirty Billion Quarters Can't Be Wrong: Or Can They? A Look at the Impact of Video Games on American Youth', *Today's Education*, 1982-3 Annual, 1983, pp 52-55; John Price, op cit, pp 111-125; Eric Egli and Lawrence Meyers op cit, pp 309-312; *EL News*, 'Anti-Video Game Movement Gathering Momentum', *Electronic Learning*, vol 1 no 3, 1982, pp 12-13.

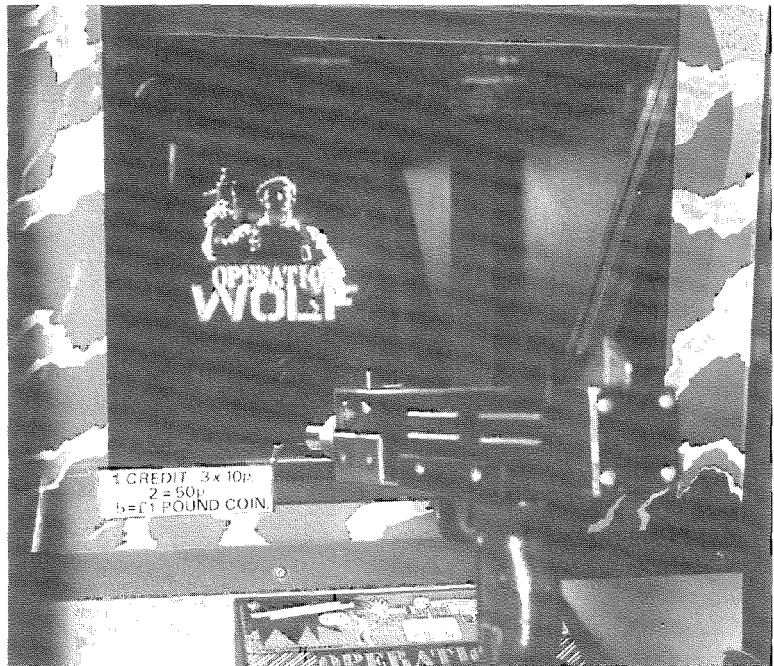
¹⁶ Neil Frude, *The Intimate Machine: Close Encounters with New Computers*, London, Century, 1983, p 68.

¹⁷ This same concern has carried over into writing from an overtly socialist perspective, as in Tony Solomonides and Les Levidow, *Compulsive Technology: Computers as Culture*, London, Free Association Books, p 6.

amusement park and turn it into a centre for family entertainment. The homely table-tennis contest may have been particularly attractive in this light. More generally, the electronic hi-tech form of the new games signalled a cleaner, more modern image. Meanwhile, the coin-op machines began to spread from amusement arcades to bars and shops.

Despite these intentions, video games were starting to run into some opposition by the end of the '70s.¹⁵ The criticisms from the anti-games lobby were diverse. In the US, moral panics resulted in some much publicised by-laws to regulate arcades. At a national level, the Surgeon General issued a warning that video games could be dangerous and addictive to children, while the National Coalition on Television Violence extended its area of interest to include the new games. The US was not alone in such actions. Perhaps the most vigorous attack on video games came in the Philippines, where President Marcos ordered 300 machines to be dismantled, smashed or surrendered to military police within 15 days because of their detrimental effect on morals and youth discipline. In the UK, the Labour MP George Foulkes led a campaign in 1981 to curb the 'menace' of video games, maintaining that they had addictive properties. His 'Control of Space Invaders (and other Electronic Games) Bill' was put to the Commons and only narrowly defeated.¹⁶

One set of worries focused on the effect of the technology underlying these games. Critics feared what they saw as the 'compulsive' behaviour engendered by electronic game forms.¹⁷ Such a concern had already



Violent narratives: *Operation Wolf*, in which the player shoots Oriental guerillas.

been raised in relation to other media technology, such as television itself, and to computer environments *per se*, notably in the earlier concern about the attraction of hackers to computer technology.¹⁸ Those opposed to games argued that players were becoming adjuncts to the machine, from which anti-social dispositions arose. That concern was intensified because the majority of users were adolescent, and seen as especially susceptible to external influences.

A number of US studies which followed these commentaries attempted to evaluate whether the use of electronic devices was addictive or led to lack of social skills. Even some of the slightly different concerns about content, about the 'violent' narratives of games, referred back to the underlying technology of the media. As in the arguments surrounding TV, many argued that the experience of violence through mediating technology would desensitise users to aggression.

In contrast, other critics stressed the very opposite of the fears about isolation with the machine. These worries focused on the collective nature of a video games culture. Many parents and community spokespeople argued that arcade machines were a gathering point for youth.¹⁹ The games were felt to encourage 'hanging around', reviving traditional fears about arcades being 'corrupt and corrupting places'.²⁰ Video games were seen as the new focus of a separate youth culture, distracting young people from more constructive activities. Consequently, a number of studies framed their analyses of arcade life in terms of delinquency.

These latter worries reflected the fact that the location of video games within arcades incorporated the new machines into the existing social activities of these milieux. Amusement parks, as well as many of the other public sites where coin-op machines were found, were part of street culture. They were mainly male, particularly young male, preserves. Some girls were present in these contexts and there were some girl players – after all, the arcade and other public locations were meeting places. Yet observational studies found that the proportion of boys varied between 70-90%.²¹ So, while the new technology may have been brought in to mark changes, it was itself slotted into an existing nexus of social relations. Very traditional fears about 'deviancy' and working-class, male youth seem to underlie much of the apparently new alarm about video games playing.²²

The role which these electronic games specifically appropriated was that of pinball. Within a few years of the introduction of video games, pinball sales had declined by two-thirds. Meanwhile, the major pinball manufacturers were among those companies who were moving into the production of the new coin-op machines. In terms of consumption, the institutions which these young males had built up around pinball – the values, rules and rituals – were transferred to the video game. Many would-be players served apprenticeships as spectators. The public display of skill was important. There were times for discussing tactics and giving tips. Rules governed waiting for a new game. So while the games,

¹⁸ Discussed in Sherry Turkle, *The Second Self: Computers and the Human Spirit*, London, Granada, 1984.

¹⁹ Tom Panelas, 'Adolescents and Video Games: Consumption of Leisure and the Social Construction of the Peer Group', *Youth and Society* vol 15 no 1, September 1983, pp 51-65.

²⁰ Desmond Ellis, 'Video Arcades, Youth and Trouble', *Youth and Society* vol 16 no 1, September 1984, pp 47-8.

²¹ There seems to be little public market research available on arcades. These figures are derived from a compilation of small scale observational studies.

²² Arguably, the other concern about anti-social behaviour and isolation may reflect a general reservation about male over-involvement with 'things', and especially with technology.

²³ In the sense that all cultural commodities can be treated as texts. See Richard Johnson, 'The Story So Far: and Further Transformations?', in David Putner (ed), *An Introduction to Contemporary Cultural Studies*, London, Longman, pp 227-313.

²⁴ Edward Trapanski, *Special When Lit: A Visual History of the Pinball*, New York, Dolphin, 1979.

²⁵ An example of this type of analysis would be Nancy Kreinberg and Elizabeth Stage, 'EQUALS in Computer Technology', in Jan Zimmerman (ed), *The Technological Woman: Interfacing with Tomorrow*, New York, Praeger, 1983, p 255.

²⁶ Nancy Needham, op cit, p 54.

²⁷ Terri Toles, op cit, p 214.

²⁸ Tekla Perry and others, op cit, p 26; John Price, op cit, p 122.

²⁹ D Talbot, 'Pac-Man Kills Kids: Video Horrors', *Mother Jones*, April, 1983. The game was withdrawn after a campaign by Women Against Pornography.

which were increasingly for single users, were played individually, the activity remained grounded within the social life of the peer group. Some analysts could even start to describe this collective appropriation of games in subcultural terms.

As regards form, it has already been noted that the original *Spacewar* paralleled pinball in terms of a similar mix of strategy, speed and physical co-ordination. It was this genre of the 'action' game that was developed on the arcade machines. One difference was that players were now pitted against the machine instead of against each other. The rationale of the coin-operation itself encouraged this form to come to the fore. Meanwhile, the brevity of games (until skill had been acquired) maximised earnings.

Gender and Arcade Games

The new video games were different from their arcade precursor in one respect – that of having at least some narrative content. Although it is possible to subject pinball to some form of textual analysis²³, the storyline of the games allowed commentators to see the new form as a medium, and thus comparable to other media texts. Indeed, it was this feature which enabled the transfer of concerns about 'violence' from areas like TV and film to the new entertainment machines.

This narrative quality, along with the possibility of different manoeuvres on-screen, allowed the rate and form of innovation to be very different from the electronic games' predecessor. Pinball had evolved very slowly and differences between machines at any one time was often cosmetic.²⁴ In contrast, a continuous stream of new arcade video games started to appear by the late 1970s. These new releases contained not only different scenarios, but whole new configurations of action. The degree of innovation was initially even greater in the coin-op version than in the case of the early home games machines. In other words, the video game manufacturers were now very much one of the so-called 'cultural industries', akin to the film and music establishments.

It was this 'media content' which received most attention in explanations of the difference between male and female interest in video games. In particular, the most frequent argument has been that the aggressive/destructive/violent/mastery drive of many games is masculine.²⁵ Early critics also argued that scenarios such as science fiction settings were male orientated.²⁶ Stereotypical gender roles were identified in the characterisations, or in the subject positions offered to the player.²⁷ Elements of *mise-en-scène*, such as colour, were also discussed in gender terms (i.e., more colourful graphics being more attractive to women).²⁸

Certainly, the case for the games' masculine address and identification seems extremely plausible when we consider some of the more pornographic 'adult' titles. The controversial arcade game *Custer's Revenge* had nothing less than rape as its goal.²⁹ Such developments have often been explained by reference to the conditions of production – that the



Pinball machines in a London arcade: a public display of skill and strategy appropriated by electronic games.

³⁰ Perry and others estimated that there were about 100 video game designers in the US when they were writing. About 4 or 5 of these were women, mostly designing home video games. Tekla Perry and others, *op cit*, pp 28-9.

³¹ Sue Smith, *op cit*, p 150.

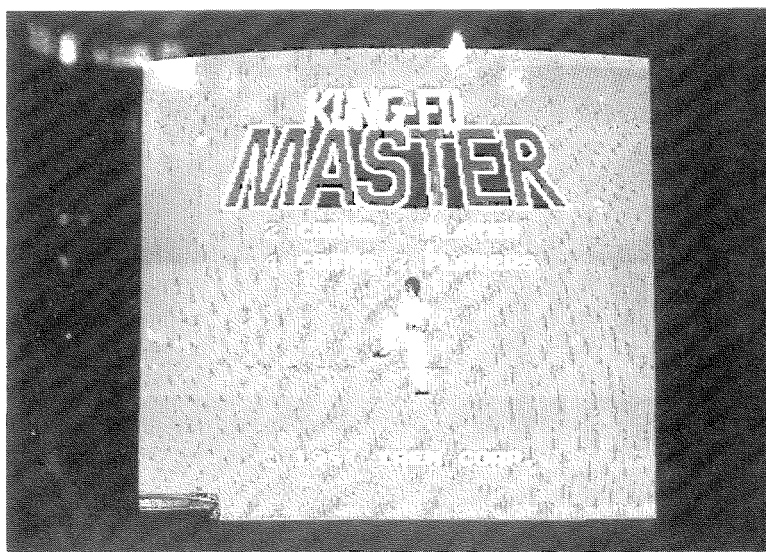
³² Tekla Perry and others, *op cit*, p 31.

vast majority of game designers are male.³⁰ Clearly, a number of the early male designers of arcade games emerged from a background of playing *Spacewar* – which seems to have paradoxically restricted their creative horizons.

However, the picture was rendered a little more complicated when, in the late 1970s, *Pac-Man* was found to be nearly as popular with women as with men. This seemed to challenge some assumptions about the masculinity of arcade games. Analysts sought explanations in the particular game content of *Pac-Man*, with one commentator claiming that ‘directing the faceless featureless Pac-Man through its model-home maze is less threatening and more closely related to hide-and-seek games than to nuclear holocaust’.³¹

A different mode of analysis, as suggested by the few female games designers in the industry, emphasised the changing context of games-playing.³² *Pac-Man* appeared at a time when coin-op games were becoming more pervasive than pinball had been. Video games had managed to achieve some respectability outside the arcade in sites such as lounges and restaurants. The designers argued that these were more socially acceptable places for women. A similar point, in fact, had been argued in relation to pinball itself. It was only when American suburban shopping centres decided that it was profitable to allow arcades into the plazas earlier in the ’70s that some of the plushier chains first managed to attract a few women pinball players. The history of pinball thus supports the argument that an important factor in the success of *Pac-Man* could have been the greater accessibility of video games.

Yet, what even this analysis fails to address when discussing the popularity of games is the nature of the ‘interest’ involved. A particular game



Kung Fu Master: a masculine text in a male-dominated medium?

may be enjoyable to a wide range of people on an occasional basis, and *Pac-Man* may have benefited from this less 'committed' form of interest. The situation in which electronic games have a public currency within particular groups of young males is another matter. This involves a continuous interest in the medium in general, and entails a more regular participation in a collective activity. It was to this core of enthusiasts that the constant flow of new game releases appeared to be principally addressed. Their experience in the arcades, and other male-dominated locales, arguably encouraged greater enthusiasm among young males for both home video games and the later computer games. The arcade not only provided a familiarity with games playing skills, but communal practices carried over into the use of domestic machines – despite the image of the isolated game-player in the home. Games developed a currency as a topic of discussion and medium of exchange within schools, while computer clubs, shows, and shops were often appropriated as the new informal arcades. In contrast, games playing remained a far more family-based activity for girls.³³ The coin-op context may have contributed to the development of games as 'masculine texts', but it also structured games playing as a collective male activity.

Home Video Games Machines

Sanders Electronics, an American defence orientated company, was responsible for developing the first home video game technology.³⁴ Ralph Baer, one of their staff who had trained as a TV engineer, conducted the first experimentation and later directed the project. In a later account, Baer described the origins of a product which was seen as an alternative use of TV sets:

*The question of how to make use of home TV sets, other than watching over-the-air programmes, had been bothering me since the early sixties. There were well over 100 million TV sets in the US alone by 1965. The idea of attaching some device to even a small fraction of that many TV sets was a pretty powerful incentive for coming up with something, anything, on which people might actually want to spend their money.*³⁵

The first commercial product, released in 1972, was licensed to the TV distributor Magnavox. The *Odyssey* machine was capable of playing 12 games, including simple hockey, tennis and maze games, many of which were similar to each other. Users had to place plastic overlays on the television screen to provide the background setting for the games. To reprogram the machine for different games, players had to plug in circuit cards. These 'TV games' initially had a much lower profile than the coin-ops, although they were reasonably successful as a consumer electronic.

In 1975, Atari released *Pong* for the US home market. The home version of *Pong* introduced integrated circuit technology – i.e., chips – and

³³ Based on the author's interviews with boys and girls and observation of a London boys' computer club.

³⁴ For the history of home video games developments, see Ralph Baer, 'Television Games: Their Past, Present, and Future', *IEEE Transactions on Consumer Electronics* vol CE-23 no 4, November 1979, pp 496-504; Al Jones, 'Video games as Psychological Tests', *Simulations and Games*, vol 15 no 2, June 1984, pp 133-134; Thomas Murrey, 'The Boom in Video Games', *Dun's Review* vol 108 no 3, September 1976, pp 54-55; *Screen Digest*, 'Video games', July 1977, pp 127-9; Stephan Bristow, 'The History of Video Games', *IEEE Transactions on Consumer Electronics*, February 1977, pp 58-68; Tekla Perry and others, 'Design Case History: The Atari Video Computer System', *IEEE Spectrum*, March 1983, pp 45-51; Peter Nulty, op cit, pp 114-124.

³⁵ Ralph Baer, op cit, p 496.

added new features such as sound effects and ricochets. From 1974, other companies had also started to enter the games market. These included pinball manufacturers, leisure specialists and semiconductor firms. In 1976 alone, over 30 new companies started producing for this home market. The particular appeal to the semiconductor companies, such as Fairchild and National Semiconductor, was the arrival of TV games at a time when they were branching out from capital goods and in the process of building up a consumer products division. These firms had seen the profitability of utilising chips in digital watches and calculators. Once video games started to use chips, these manufacturers perceived this product as being suitable for their new divisions.

Post-*Pong* TV games technology had consisted of one chip or a combination of chips on which there were fixed programs. By 1976 several companies were working to replace these chips by a microprocessor. The latter had already been introduced into the coin-ops, where the sale price of each unit justified the cost of this technology. In 1976, Fairchild Camera and Instruments introduced the 'Channel F' or 'Video Entertainment System', which would accept programmable cartridges. As far as the semiconductors were concerned, video games provided just the type of dedicated application for the new microprocessor technology which they had been seeking. Soon other programmable consoles were available from RCA, Bally, Magnavox, Coleco and Atari.

This changeover to microprocessors affected the nature of the video games product. Programmable machines, or consoles, created a flexible division between hardware and software. A separate software industry could thus emerge once video games cartridge manufacturers could sell games separately to run on the hardware. Games machines were now potentially 'software players' like hi-fis and other home-based delivery systems. Games software could be bought, collected and compared in the same way as records.

Many companies thought these 'programmables' might have a wider scope than their games origins. Whereas the earlier and cheaper TV games machines were seen as fashionable toys, the new programmables offered the possibility of permanent use, as a source of entertainment for the whole family. In particular there were hopes that the consoles might develop into more general home entertainment systems. For a time, companies developed software which was not of the arcade form. There were the so-called 'adult-oriented' card and board games, and even some educational software. Beyond playing software, wider potential uses were explored. One video game manufacturer publicised its products as mini-home computers which provided some programming facilities. Other firms talked of using them for home control. Mid-'70s forecasts similar to those then circulating in microcomputer firms had even tempted companies like RCA as well as several semiconductor companies to enter this field, whereas they had taken little interest in the arcade machines. One reporter, quoting Fairchild's Vice President of video products noted:

*'The whole area of programmables will do a lot more than just play games. They are going in the direction of further exploitation of the power of micro-processors'. Programmable units can help with a family's bookkeeping, aid the child with his homework, and many other practical day-to-day responsibilities.*³⁶

That vision never materialised. It was only from the late '70s that the console market started to boom as the new domestic fad. By this time many of the disillusioned producers had pulled out of the field. Sales of hard- and software for the industry only peaked in 1982. Furthermore, the appeal of the machines remained firmly based on games. Only Magnavox, Mattel and Atari were still producing TV games by this time, and of these Atari was clearly dominant, with 80 per cent of the US market by 1980. In that year, 3.5 per cent of US homes had consoles. By 1981, this had risen to 8 per cent. Atari was now the training ground for many designers, a number of whom later set up companies to supply the software cartridges for the Atari console and the other machines.

As the boom picked up, a range of new companies entered, or re-entered, the market. A number of film companies, such as 20th Century Fox, set up software arms and arranged licensing deals. Atari and Lucasfilm arranged joint projects. Games were seen by the film industry as both competing for the same 'entertainment dollar' and as being a new outlet for cross-licensing. For similar reasons, various companies from the toy industry also tried to diversify into this area, Coleco being the most successful newcomer. Meanwhile existing games producers started to branch out into new forms of distribution, whereby telephone companies downloaded the games to homes by telephone.

Although there were always dissenting voices which talked of games as a possible fad, the general view aired in the trade press in the early '80s was optimistic. The one cloud on the horizon was the rising home computer industry. Initially microcomputers were much dearer, and were felt to be catering for a different market. But as home computer prices fell, the new product started to appropriate the role of consoles and take away sales from the video games market. The consensus in the trade press is that by the end of 1983, a year after video games actually reached peak sales, the video games 'boom' was deemed to be over. In fact, sales did not simply disappear. At reduced prices, the consoles were relegated to toy departments. Here, they continued to sell steadily, albeit in much lower volumes.³⁷

³⁶ Beverly Knudsen, ' "Happy Days are Here Again": For Video Games', *AudioVideo International*, December 1977, p 42. This US trade journal carried regular articles where hardware manufacturers expressed such hopes.

³⁷ Author interview with Atari management in Britain.

Home Game Texts

Most of the early home games were variations on the bat and ball idea found in the *Odyssey* machine and in *Pong*. *Pong* itself is an example of a game which made the transition from the arcade to the home machine.

Others, such as driving games, also crossed over from the coin-ops. However, the early chip technology caused a considerable delay in this transfer, since the dedicated integrated circuit chip needed for the home machine could take a year to develop.

The companies who introduced microprocessor-based technology widened the options by adding cartridges which contained other game forms besides those from the arcades: for example, noughts and crosses, black jack and chess. A countervailing tendency arose from the fact that transferring games from the coin-ops was now much quicker with software programming. Home versions could be released while a game was still in vogue in the arcades. Thus, the coin-ops were used even more as a testing ground for products which might then be cross-licensed to the home market.

In fact, many industry commentators consider that it was an arcade game which first boosted sales of the domestic machine. *Space Invaders* enjoyed unprecedented success as a coin-op, helping to increase overall sales in that sector after it was introduced in 1978. After Atari had bought the home license and was able to offer a version for their consoles, home sales also increased considerably.

Licensing also expanded to other areas. By 1982, the increased rate of new releases was supported by video game magazines which carried news and reviews of latest games available. In these circumstances, the games companies and film studios seem to have felt that video games had become the type of commodity that could be linked into the other cultural industries. However, even if not originating directly from the arcade, the overarching form of games – the real-time ‘action’ – was still derived from the coin-op source. The scenario and plot of home games was now simply more varied.

Home Computer Games

³⁸ The British history of the micro is derived from the author's PhD thesis, the research for which entailed interviews with a variety of producers. See Leslie Haddon, 'Home Computers: the Making of a Consumer Electronic', *Science as Culture* no 2, 1987. On Sinclair, see Ian Adamson and Richard Kennedy, *Sinclair and the 'Sunrise' Technology: the Deconstruction of a Myth*, Harmondsworth, Penguin, 1986.

In the mid-'70s, microcomputers had emerged as a hobbyist product in the US.³⁸ Some of the leading hardware manufacturers and industry observers saw a potentially lucrative future for this machine as a consumer electronic. The most ambitious long-term scenarios, such as those cultivated by the semiconductor giant Texas Instruments, envisaged a micro fulfilling all the promises of the programmable consoles and more. Not only would micros run a variety of software, but they could eventually be connected to telecommunications systems and even have home control facilities. The home computer could become a central part of the household, routinely used by all the family, an 'infrastructural machine'.

In the shorter term, difficulties with implementing telecoms and control functions meant that US producers pitched the micro as a more restricted, albeit still versatile, 'software player'. The activities of Sinclair Research, in particular, helped to establish a different underlying

ing model of the micro in this country. The first British home computers, released in 1980 and 1981, were sold very much on the basis of being products to explore the world of computing. Hence, Sinclair preserved a continuity with hobbyist endeavours, which was partially reinforced by Government and BBC schemes to promote computer literacy. Even when Sinclair and other firms started to provide more applications, and thus move towards the software player paradigm, the undercurrent of the computer literacy theme remained stronger in Britain than many had originally anticipated.

Against this backdrop, we can now examine the development of computer games. Hardware manufacturers who anticipated that the micro would find wide-ranging application, including the later Sinclair, maintained an ambivalent attitude towards games. In their favour, games provided a familiar use requiring no expensive additional equipment such as printers.³⁹ Some producers even recognised the possibility of taking business away from the profitable video games market. On the other hand, too strong a games identity might threaten the status of the micro as a more general purpose machine, and indeed push the micro towards the role of a children's toy. Hence, early advertisements for micros never overtly emphasised games as central activity; if anything, the key stress was on the educational function of the machine. Games were always mentioned in advertisements, as well as fostered in software support offered by manufacturers. But games playing was depicted as being only one use within a range of applications.

The earliest interest in these computer games came from the early hobbyists, who both produced and consumed this form of software. The hobbyist magazines had always devoted some space to games and thus provided this software genre with respectability. Within a few years of the first home micros being released, a wave of books introducing programming came increasingly to use games as the vehicle to explain the structure of computer languages. Eventually, even the manuals which were packaged with the hardware adopted this approach.

Games also soon proved to be popular outside initial hobbyist circles: especially among male youth. Since the previous video games consoles had made less impact in the UK than in the US, micros provided many people with their first chance to play home-based games. This demand encouraged more hobbyists to start up their own part-time mail order ventures, selling software for the new home computers. Aided by the cheap cassette technology, these initiatives developed into a small cottage industry. Within a few years, teenagers who had received the early micros as gifts provided a further source of games programmers. Although this software industry was relatively small, the national press carried stories of successful entrepreneurial schoolboys which fuelled further interest. Consequently, software which aided game design proved to be very popular.

By 1983, several substantial publishing, record and video companies had entered the computer games field. These large firms helped to

³⁹ Although not strictly necessary for game-playing, joysticks were the most common peripheral bought for micros.

transform software production for this increasingly lucrative market into an industry organised on the same model as their other interests. In this process of restructuring, a majority of the small start-up firms, as well as others who had tried to cash in on the games boom, either went bankrupt, amalgamated, or otherwise departed from the market.

Under the new regime, games writing became routinised and continuous instead of haphazard and occasional. Active marketing of the latest product guaranteed sufficient chart hits for profitability. This structure operated in conjunction with a new type of computer magazine, which was geared to entertainment and gave far more coverage to game developments than their hobbyist orientated predecessors. The new system had the effect of systematically promoting the games form while often relegating other software genres to the fringes of the industry.

Meanwhile, the newly emerging magazines went beyond reviewing games at face value. There were regular features on how to break into the programming structure of games in order to see how their inner workings operated. There were suggestions about how to make changes so that games operated differently. In this respect, the cassette technology and organisation of the hardware made such alterations possible, whereas this had not been so in the case of video games. In other words, there was an infiltration of the hobbyist project into games playing, which for some users added a new dimension to the activity.

The Microcomputer as Games Machine

By 1983, the sudden entry into the market of a range of new hardware companies culminated in considerable competition, price cutting and a strain on the profitability of many firms. As in the case of software houses, a number of these firms left the industry or went bankrupt. In 1984, the Christmas overstocking of micros produced a further crisis in the UK. Following the subsequent price cutting, Acorn Computers had to be rescued, and later even Sinclair ran into difficulties. The British media which covered these developments suggested that the 'bubble had burst', giving rise to a widely held public perception that the home computer had somehow faded away.⁴⁰

However, any assumption that the home micro has disappeared is incorrect. Sales of hardware and software have remained at a high enough level generally to support the software companies that still operate in the market. The temporary financial problems experienced by many firms have by now been resolved, as most companies have gradually moved into profit. There are slightly fewer magazines to be found. Nevertheless, the computer press has a firmly established section of newsagent shelf space. Home computers may have a lower media profile and command less shelf space in the multiple retail departments, but the industry is far from dead. Even by the time of the 'crisis', the home micro had

⁴⁰ This view of the burst bubble has been accepted in what are otherwise more critical analyses. For example, Pam Linn, 'Microcomputers in Education', in Tony Solomonides and Les Levidow (eds), *op cit*, p 58.

already become established as the new vehicle for electronic games: the computer had been appropriated as a games machine. This is still apparent from all the quantitative data on usage, and from contemporary interview based research. In my own research, a sample of young users conveyed the impression that perhaps the peak of interest in games had passed, but games were still routinely played by many boys and girls.⁴¹ In the face of this, many hardware manufacturers both supported games generally and took pride in particular successes. Yet the original reservations about games still continued. Here, the account manager for Commodore's previous advertising agency summarised his concern in the early '80s:

*We wanted always to see our product as a proper piece of technology: but fun technology. We didn't want to see it as a toy. For one reason, it would have relegated our product into toy departments, which would have made it a Christmas buy. I mean, it was a Christmas buy anyway. Like, 60% of the market was in 3 months before Christmas. But what we were always attempting to do was to flatten out this wave, or bulge, and if we'd been in the toy route, we would have had to be cheaper anyway. We would have been cornering ourselves right into the Christmas market.*⁴²

Consequently, when advising on how to pitch the manufacturer's next machine, the Commodore 64, the agency gave the following advice:

We said that to [sell micros as games machines] would cheapen this product. It will automatically mean that it will die sooner or later 'cos it will be faddy. This could end up just like the video games that we had taken on three years earlier. You've got to start to broaden its usage.

Others in the industry have shared this broad sentiment. It has occasionally been reflected in a disappointment that early ambitions for a more all-purpose machine were not realised: the technological 'revolution' had gone astray. Yet, optimists continue to anticipate and work towards the goal of the infrastructural machine. The two broad paths they have followed constitute different approaches to making a break with the games machine.

The first strategy, as indicated in the above quotation, has involved attempts to broaden the identity of the existing computer product. In the early and mid-'80s, hard- and software producers tried to widen that usage by promoting other, non-game entertainment software, such as art and music packages. For a time, home educational software seemed to be the market just around the corner. Some still have hopes for a telecom and home control revolution that would give the micro a new lease of life.

Currently, many place their faith in some sort of cross-over product from business micros. They look especially at some of the initiatives of the Amstrad firm. These analysts and producers hold that the PC (Personal Computer) series of micros and low-cost business software might

⁴¹ Other research on usage of micros includes a longitudinal study at the Centre for Mass Communications Research in Leicester University, and David Skinner's current Ph D research at Brunel University. A new project on the use of Information Technology in the home is now starting at Brunel under the direction of Roger Silverstone.

⁴² Author interview with Commodore's advertising agency account manager.

establish a mass market for a 'really useful' computer. Others see the route to an infrastructural machine as lying in general technological improvements in micro technology. They look towards more powerful machines, as exemplified by the Atari ST and Commodore Amiga series. These enhanced models or connections with video and compact disc technology might take micros across a threshold to challenge the predominance of games and establish other interactive media.

The second approach involves abandoning the home micro product on the grounds that this route is beyond redemption. For producers considering this option, the functions of the infrastructural machine could instead be realised by other technological configurations which are not represented as 'computers' – for example, as a new product called an 'interactive compact disc player', or as automated 'smart homes'. In effect, the home computer could then remain the principal vehicle for interactive games.

The Future of Computer Games

In terms of consumption, fears that games would be a fad have certainly not been realised to date. As with hardware, the media coverage of computer games has declined with the number of successful-young-programmer-stories. By the mid-'80s, the shelf space which games commanded had also contracted. However, following the reduction in the number of software houses, the games industry has achieved a degree of stability which has continued to the present. In addition, international sales have become increasingly important to British software houses since the early '80s. The UK is now a major exporter of games to other European countries.

Since the early '80s new marketing strategies have promoted cheaper 'budget' software, given old products a new life via compilations, and retailed software through a wider range of outlets, including garages and corner shops. As regards the software itself, apart from incremental improvements such as enhanced graphics detail, arcade hits and other cultural industries offer continual prospects for conversion. Occasionally, a new sub-genre appears, such as kung-fu, quiz and horror games. Even soap operas like *EastEnders* have found their way onto the games format. Nonetheless, there is still concern about a perceived failure of innovation within software, and criticism of a lack of creativity in this field.

One basis for this concern lies simply in the mechanism whereby successful new games are immediately followed by a spate of near copies. Yet this process is not very different from the record and film industries, where producers seek successful formulae. Still, while there appear to be enough original releases to keep the games industry ticking over, there is a deep-rooted concern about competition from other cultural industries. Commentators have pointed to the way in which new lower-

priced videos and compact discs have taken shelf space from micros in many multiple-retailers' outlets. Is the current innovation sufficient to keep up with that in other fields competing for that proportion of disposable income?⁴³ Do changes in scenarios and the playing skills required provide enough novelty?

Under these conditions, some producers and analysts have placed their longer term hopes in hardware innovations. One current development is the re-introduction of the video games console, whose technical merit rests in the enlarged graphics capabilities of the 'dedicated' (microfunctional) machine. More interesting is the tendency for games to expand onto those micros which constitute the very attempts to make a break with the games machine. Thus the new games for the PC family, and even more releases for sophisticated machines such as Atari's. Given current research trends, we can safely predict that computer games will also emerge on any new products using the video and compact disc based technologies. The capabilities of this new hardware would certainly facilitate further changes to games as texts. More contentious is the fear that these latest hardware products might themselves be relegated to the status of the new games machines: and merely that.

⁴³ For example, see Mel Coucher, *op cit*, 1986, p 8.



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TIME SHIFT

REFLECTIONS ON VIDEO VIEWING, BY SEAN CUBITT

RICHARD COLLINS' closing address to the First International Television Studies Conference in 1984 asked: What is the object of Television Studies? Posed in part as a problem of relationships between the literary and sociological origins of the field, and of their various allegiances to both political economy and to semiotics, the question is more than self-criticism. It is fundamental for the whole sphere of cultural studies, problematising the very definition of traditional subject areas and the possibility of their political function.

Althusser's schema for a materialist science, though open to criticism, offers a useful model of the acquisition of knowledge: object of study; problematic; knowledge produced. Crudely stated, the object of television studies is described variously as textual or institutional, the problematic as socio-economic analysis or interpretation, and the resultant knowledges might be even more crudely stated as cultural pessimism or viewer power. Involved in the various models bulldozed into this sketch of the field are the status of the televisual text (segment, programme, flow . . .), of the TV institution (local, national, global) and relations between the two. And in each of these areas, there is the question of audience: saleable commodity or critical activists?

For my contribution to these issues, I would like to begin from local conditions in the United Kingdom, and especially in England, particularly as they relate to the widespread use and ownership of domestic video cassette recorders (VCRs). It is my belief that these generalisations cannot be extended geographically or historically. In particular I would argue that the proliferation of VCRs in this country has altered the terms of all electronic – and possibly cinematic – viewing, but the same is not necessarily the case in areas where, for example, communal viewing is the dominant practice, where broadcast is the dominant distribution mode, or where cinema is strong enough to reduce the entertainment functions of TV. Involved in this disclaimer is the question of how programmes or formats in world-wide distribution are viewed variously in

various cultures. With these provisos, I want to set out some propositions concerning broadcast television and video as cultural discourses and attempt to see what links can be drawn between them.

BROADCAST TV

¹ John Caughie,
 'Rhetoric, Pleasure and
 "Art Television" –
 Dreams of Leaving',
Screen vol 22 no 4,
 1980, pp 9-31.

Television is radically heterogeneous. Although, as John Caughie argues, television derives strongly from radio¹, it also draws on a wealth of other forms: literary, journalistic, filmic, sporting. . . . Likewise its modes of organisation in the UK partake of two traditional forms – the regional network of commercial broadcasters based on advertising revenue, and the state-organised, licence-financed BBC – and two more unusual ones – Channel Four as 'publisher' of independently produced programming, and the hybrid form of the Welsh-language channel Sianel Pedwar Cymru. Delivery systems are likewise varied: residual 405 as well as the dominant 625 line PAL transmissions; miniature receivers and flat-screen video projectors; black-and-white and colour receivers, often in the same home; sound reproduction varying from the sublime (on TV/radio link-ups) to the ridiculous. Television is historically an impure medium. It is, I believe, impossible to say of TV that it is essentially anything.

Television manufactures invisibility. The condition of television showing us anything is that it cannot therefore show us everything. In particular it will not show us its means of production. TV cannot show us what is hidden from sight: in Rob Hof's film *Don't Eat Today Or Tomorrow* (Holland, 1985) the camera pans across the Geneva skyline, while a speaker tells us that what is most important in Geneva, the subterranean vaults of the Swiss banks, is what you can't see. If TV produces the knowledge, it also produces ignorance. A medium that specialises in giving to non-existent entities (ghosts, wombles, muppets) a local habitation and a name also knowingly speaks to viewers of what it is not permitted to show (Official Secrets). Thus there is also the constant belief that beyond what you know you aren't seeing lies the realm of what you guess you aren't seeing – The Truth. There are entities that do not lend themselves to photography – power or labour for example – which have to be inferred as second-order signifieds, and which provide the basis for more detailed negotiations over the status of truth on television: what one person isn't able to see even if it is on screen but which another finds glaringly obvious. Television's categories of invisibility are necessarily bound up with its production of visibility: the programmes and adverts that we see are the visible fraction of what we don't see – because TV is too all-pervasive to be seen *in toto*, because some programmes never get shown, because some programmes never get made. What can be known about television is circumscribed by its partiality: in what sense can anyone, or even any one discipline, grasp the

² Stephen Heath and Gillian Skirrow, 'Television: A World in Action', *Screen* Summer 1977, vol 18 no 2, p 57.

³ Raymond Williams, *Television: Technology and Cultural Form*, London, Fontana, 1974, pp 86-96.

⁴ Jane Feuer, 'The Concept of Live Television: Ontology as Ideology' in E Ann Kaplan (ed), *Regarding Television*, American Film Institute Monograph Volume 2, Frederick MD, University Publications of America, 1983, pp 15-16.

⁵ Jean-Pierre Oudart, 'Cinema and Suture', *Screen* Winter 1977/8, vol 18 no 4, pp 35-47; Daniel Dayan, 'The Tutor-Code of Classical Cinema', *Film Quarterly*, Fall 1974, pp 22-31.

whole of the medium? And how legitimate is it to specify television as an object of study when it bleeds into other broadcast media so constantly – into radio particularly within broadcast institutions like the BBC and IBA, or into print media and film in organisations like Rupert Murdoch's News International? How far can we go in taking audience sampling methods as providers of knowledge? In short it is impossible to know television as a totality. Or to put it another way, there can be no total knowledge about television.

Television is absent. Unlike cinema, the TV image is small, less well-defined, often watched in the light rather than the dark, and is generally a domestic or social leisure appliance, so that its messages are in competition with the rest of domestic or social life. Like that life (or those lives), it is ephemeral in its broadcast form: in the words of a pioneering essay on TV, it proposes itself as absolute presence, 'here and now, for me personally'². Thus the characteristic flow of images noted by Williams³ is also a support for the ideology of presence. In this sense, one can infer from the ideology of presence the practice of watching for company, especially among heavy media users like the elderly. Yet the broadcast flow is also a vanishing, a constant disappearing of what has just been shown. And because TV viewing is subject to constant distraction, and because 'it would be more accurate to say that television is constituted in a dialectic of segmentation and flow . . . that television possesses segmentation without closure'⁴, viewing is also a process of missing. TV's presence to the viewer is subject to constant flux: it is only intermittently present. The technical composition of the frame itself is a dialectic of constant becoming and constant fading. In this sense, television is simultaneously already over, and yet to become: its presence to itself is in question. Following Oudart and Dayan⁵, film theorists argue that in cinema the transition from shot to shot is the organising principle of suture: but in television, it seems to me, the transition from segment to segment within the daily flow is the organising principle of loss of suture, the loss of the subject to the televisual discourse. Television's presence to the subject is itself a problem. Internally and externally, TV is sited, to borrow the title of a recent BBC thriller series, at the edge of darkness. What is it that disappears in channel zapping but the entity television itself?

Television is powerless. Because television is inexhaustible, it is exhausting. It is a cornucopia whose very wealth is its greatest weakness. As Serge Toubiana points out, there are always two discourses in television, that of appearances, of the odds and ends of reality that strive to appear on the screen, and that of the real, of the machinery and the televisual apparatus. In so far as it deals in appearances, it is open to interpretation; in so far as it partakes of the real, it is transformable. TV is therefore not powerful, but the object in play in a struggle over power. In one direction, the discourses about public service broadcasting in the

UK rely so much on ratings (viz, for example, *EastEnders*) that the question emerges: if the BBC, like commercial broadcasters, must deliver audiences, who is it delivering them to? Do broadcasters serve the public, or is the public serving the broadcasters? In another direction is the negotiation between the real apparatus and the appearance of reality it carries. 'This relationship of force,' writes Toubiana, 'constitutes the basic canvas of television: sociological window always in search of more reality/ies, aquarium where the appearances of life unfurl *on the one hand*, principal instrument of a Ministry of Propaganda that won't own up *on the other*. In television, power is the impossible object, the object of an infinite quest: object little "a".'⁶

Television has to be produced as an object. If in some senses television as discourse produces subject positions from which it is to be understood, its own status as originating point of that process is nevertheless in question. Institutionally, as broadcast flow and as viewing process – even as the object of discourse about television – television is a site of struggle, and one of the stakes in that struggle is the existence of TV as a discrete entity. This is not to argue that TV doesn't exist, but that its existence has to be produced in relation to the subjects which, institutionally and discursively, it is said to produce. If the subject is produced as subject in the television discourse, why should we presume that television is not produced as object in the same relationship? I'd argue that the status of television – ontological, epistemological, political – is produced in the individual viewer, in the micro-culture of the living room, in the local, national and global cultures variously, as a kind of ghost, a frightening, comforting, harmless, powerful, informative, debilitating, entertaining, boring matrix of contradiction which has to be believed in in some form before it can take on the aspect of producer of meaning. The unstable dialectic of the real and the apparent, the present and the absent, the visible and the invisible is the condition under which TV enters into the social. The viewing of – and the writing about – television has as a primary function the task of producing TV as an entity. That such a function exists for TV studies is surely proof of the instability of the TV object.

VIDEO

With video, television enters the age of mechanical reproduction. Recently the leading Scottish TV and stage dramatist John McGrath wrote: 'Drama has lost the quintessential quality of television – that of being an event brought to us as a nation simultaneously. Ten years ago, I think television drama was still primarily created as an event specially tailored for the one-off moment of transmission. This was the quality that made it different from film, and linked it to the heroic unrepeatability of the experience of theatre.'⁷ The aura of live televi-

⁶ Serge Toubiana, 'Introduction', *Cahiers du Cinéma: Numéro Spécial – Télévision*, no 328, Autumn 1981, p 5; my translation.

⁷ John McGrath, 'Strike at the Fiction Factories', *Edinburgh International Television Festival Magazine*, no 10, 1985, pp 52-3.

⁸ Jane Feuer, *op cit*, p 15.

⁹ Jacques Derrida, *Of Grammatology* (trans Gayatri Chakravorty Spivak), Baltimore, Johns Hopkins University Press, 1974, especially part II, chapters 1, 2 and 3; see also 'La structure, le signe et le jeu dans le discours des sciences humaines' in *L'Écriture et la différence*, Paris, Seuil (Collection Points), 1967, pp 409-428.

¹⁰ Margaret Morse, 'Sport on Television: Replay and Display' in E Ann Kaplan (ed), *op cit*, pp 48-9.

¹¹ Ann Gray, 'Video Recorders in the Home: Women's Work and Boys' Toys', paper presented to the Second International Television Studies Conference, Institute of Education, London, 1986; 'Behind Closed Doors: Women and Video Recorders in the Home' in Helen Baehr and Gillian Dyer (eds), *Boxed In: Women On and In Television*, Pandora, 1987, pp 38-54.

sion, the uniqueness, the here-and-now-ness of the broadcast event, is demolished by the use of the VCR, as Jane Feuer observes⁸. Perhaps it is McGrath's name that gives this quote its particular resonance for me: when I was a student and without a TV, I remember persuading a communal household down the street to watch the television of one of McGrath's and British television's most celebrated drama presentations, *The Cheviot, the Stag and the Black, Black Oil*. In a basement crowded with the household and their neighbours we watched and talked into the small hours. Communal viewing and live TV are contrasted in McGrath's article with the atomised, 'dead' viewing of video in tones of nostalgia. It is a nostalgia that seems closely related to that of Rousseau and Lévi-Strauss as analysed by Derrida⁹, time-shifting stands in the same relation to 'live' TV as writing does to speech. What underlies McGrath's nostalgia is the acute perception of the presence, the fullness, the self-sufficiency of the broadcast event. Compared to it, videotape appears belated, incomplete and unsatisfactory. Liveness in a sense serves to mask the fragmentary nature of television and its audiences. We might argue in reply: videotape forces back onto broadcast its own incompleteness. Transparently recorded, video establishes a new relation with the audience, one that alters, I believe, the way we watch now. Because even if you have forgotten to switch on the timer, there is always someone else who may have, the aura of irreplaceability is eliminated – much as Margaret Morse has argued that the 'action replay' alters the viewer's relation to 'live' sport¹⁰. TV can cease to be a slave to the metaphysics of presence.

Videotapes don't talk back. If television's characteristic mode of address is the invitation to dialogue (the ubiquitous 'we' of presenter-speak, the 'Thank you for inviting us into your home tonight'), it is so only because of the metaphysics of presence. Time-shifting alters the viewer relation to the shifters: obviously to the referent of 'tonight', but also to the complementary particles 'we', 'us', 'you', 'your'. Presence is the condition of dialogue – think of the emotional phone-call whose silences compel you to ask, 'Are you still there?'. That is the anxiety which video brings to the viewing process. It would be difficult to watch a video for company, in the way you might watch TV or listen to the radio. The account of time-shifting among Ann Gray's sample of working-class women viewers in the North of England¹¹ suggests the decline of televisual presence ends the complicity between screen and viewer legitimated by broadcast's mode of address. Merely 'watching television' allows the alibi of 'it just happened to be on'; time-shifting implicates the viewer in a potentially guilty decision to view, a one-sided decision lacking the validation of broadcast presence. Video we have to thank for: extending the viewing day, freeing viewers from the tyranny of the network schedules, freeze-framing, fast forward and reverse vision, the chance to spool back and forth on a tape and thus to disturb the diegetic hold of broadcast, the chance to watch in bite-size chunks,

and therefore multiply the available programme formats. But all of these we gain only at the gamble of solipsism. The removal of broadcast's (mendacious?) 'we' is the condition of entering a different relation with the screen, one which forces back on the viewer responsibility for the item viewed and for the uses to which it is put. Because it takes issue with the presence of television, it alters, in terms I can't yet articulate, the possibilities of identification.

You cannot watch a video for the first time. Like any recorded medium in Benjamin's age of mechanical reproduction, video shifts out of the omnipresent present. It makes the present contingent on the replication of the past and the plotting of the future. Though video includes TV (in the same way that TV includes film and radio), it does so by reproduction, stealing the aura from TV in order to include within itself the property of infinite repetition. In this sense video joins the other recording media not simply as supplementary memories of events and sensations but as the possibility of their replication. So that we have to see in video viewing that it is always already the repetition of a process that has, for the viewer, no origin, no initial presence, from which to obtain a guarantee of its own authenticity or presence. This property has become an investment: not only can a series, programme or segment be held for study (removing them from that complex and unstable entity 'television'), they can be held for rescheduling across a variety of distribution media in a way that has fundamentally altered the economics of TV production. The balances of power between institutions, texts and viewers are fundamentally altered. Time has shifted.¹²

Video is out of control. Broadcasting began as a telecommunications technology with Marconi's transatlantic 'S' in morse code: but commercial and political in-fighting reduced it to a largely monodirectional medium. Video began as a surveillance technology with important military input backed up by the need of the new TV industry to control the potential waywardness of live broadcasting. This origin brought with it the property of immediate playback. There is nothing natural or essential about these technological variants: they too must be produced, but like many of late capitalism's inventions, they exceed attempts to control them. In the case of video this has led to the extremely clumsy Video Recordings Act, through which government has attempted to make up for the lack of institutional control of the medium by statutory censorship. Likewise the Department of Trade and Industry White Paper on copyright, *Intellectual Property and Innovation*, takes the unusual step of legislating for a lack – 'new legislation will introduce a compulsory licensing system which will operate in the absence of a video levy'. It remains unclear who is under compulsion here, since 'Any programme not falling within a certified scheme will be regarded as freely licensed'.¹³ These difficulties may stem from the problem of defining, again, what video is. Hardware manufacturers seem to have carried the

¹² Pace Andy Lipman (*Video*, pamphlet to accompany *Video 1, 2 and 3* and *Ghosts in the Machine*, London, Channel 4, 1985, p 3) who doesn't share this conviction.

¹³ London, HMSO, Cmnd 9712, April 1986; section 7, paragraphs 3 and 4.

¹⁴ See Sean Cubitt, 'Innocence and Manipulation: The Politics of Censorship in the UK' in Alan Tomlinson (ed), *The Politics of Consumption*, London, Comedia, 1988, forthcoming.

¹⁵ Jeremy Tunstall, *Communications Deregulation: The Unleashing of America's Communications Industry*, Oxford, Blackwell, 1986, p 178.

day thus far, needing a new commodity to sell into the domestic leisure market as television sales and rentals bottomed out. Now they must struggle with software manufacturers, and with the paternalistic elements of the reproductive process in capital – the moral campaigners most closely but not exclusively associated with the Conservative party. In the moment of claiming to protect children from the most elegant aspect of the technology, its simplicity of use, there is an attempt to control its openness and perhaps also its political possibilities.¹⁴ But it would be rash to say that video, because it is beyond normal forms of institutional control, is in the sphere of viewer control. In fact the reach back from video recording to broadcast is now the subject of internal reviews in both the IBA and the BBC, with a view to restricting broadcast in the interests of controlling time-shift viewing. And the advertisers are worried. Video has made more complex the struggles over media power: it has not annealed them or even shifted the balance, except as a production medium. If current moralist discourses have directed attention to the masturbatory functions of video viewing, they have done so consistently through a broader political concern with the crisis of the family as institution (in line with other Tory policies to transfer social welfare into the 'private' sector). The VCR has entered as a new factor in a strange new set of circumstances. As Jeremy Tunstall observes, 'The VCR is not just a wild card: it seems likely to be a rogue that will deal a whole handful of wild cards, which in turn points towards a very chancy game of poker.'¹⁵

ARGUMENTS

In the dealing with both left cultural pessimism, and right-wing moralist attempts to pre-empt any democratisation of media control, the object status of TV as practice, institution and text has to be put into play. When we say that we 'see' a film but 'watch' television, and now quite commonly 'view' a tape, the choice of verb varies the visual relation. Seeing has a root in physical perception of course, but also in the sense of an understanding derived from sight ('Oh, I see'). Watching has its origin in a time-based activity, the first watch of the night for example, a sense of surveying, of keeping somehow informed but in a distant sort of way. Viewing seems to me to have an even more distant relation, at once formal (reviewing the troops, viewing a house for purchase) and even more inattentive. Video has enabled TV to take on an emphatically Brechtian reflexivity, making transparent its recordedness, and its openness to change, scattering the elements of diegesis through broken viewing or the reviewing of favourite scenes. From the immense powers of cinema to the negotiated siting of video is a shift from central control which might potentially unleash an entire new culture within the moving image media and beyond.

It is only in the light of video that I have been able to make my propo-

sitions about television, by reference back through the new technology to see how the old has been altered. Perhaps it has also altered the viewing of films – certainly video is a favourite medium now for feature film distribution and even for study. As production facilities become more and more available, the educational aspects of our work will become more and more crucial: our students or whatever audiences we reach are more and more familiar with programme formats, techniques and practices. Our job should be to demonstrate the contingent nature of the qualities of television, to argue that they are open to change, and to investigate in common the potential routes for producing a new media culture.

I've tried to argue that central to this concern is the question of what television *is*. If we hypostatise television as an object, if we insist that it is a self-sufficient, autonomous and unchanging essence, we have already lost the battle for change. Television should be conceived of as a field of struggle in which the discourses of TV Studies generally have a role, however minor, to play. It is a step that both liberates and increases responsibility. The title of the SEFT Education Conference in June 1986 expressed it well: *Watching Media Learning*. It seems to me that the *aim* of television studies is in question, not its object; and that that aim should be to intervene in the production of televisual meaning, institutions and education in order to produce an open, accessible and democratic media culture that will serve the needs of all people. This is bound to sound apocalyptic, or utopian, but academic discourse is always political: it is a matter of being conscious of that, and of finding the uses of that discourse for progressive causes. For those of us on the Left, this means eliminating the stranglehold of the givenness of television, starting from what we have to do rather than celebrating what is already there. We have to start from the relations within which this slippery object is constituted.

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HOLLYWOOD'S HOLD ON THE NEW TELEVISION TECHNOLOGIES

BY DOUGLAS GOMERY



Hit film, hit video. In 1986 *Top Gun* generated 82 million dollars in theatrical rentals and 40 million in tape sales.

The 1980s have seen the introduction of a multitude of new media technologies into the United States. One can now watch visual images delivered from space satellites, home video recorders, cable television, microwave relay and master antennas serving multi-unit dwellings. Camcorders have made millions into their own video producers. From Beta to VHS, DAT to CDs, a dictionary of fresh terms has entered the lives of all interested in film and television.¹

No single article could realistically deal with all this change, examining the dozens and dozens of

possible and real social, cultural, economic and psychological effects. To further understanding of the media technological transformation in the United States during the 1980s, this one will begin with an analysis of economic effects. In

¹ Beta is a consumer videocassette format employing half-inch tape; VHS (originally Video Home System) is the leading half-inch video cassette format in the US and UK; DAT (Digital Audio Tape) is a new audio cassette format available in Japan and Europe but not in the US; CD (Compact Disc) is a five-inch record on which a digital audio signal is pressed so that it can be read by a laser beam.

general I want to focus on the central role played by the US film industry and its distribution and exhibition of feature films.² In particular I will examine how the film industry has fully adopted and exploited the 'new' television technologies.

During the '80s Hollywood fundamentally changed how North Americans view and hear feature films. Consider that, in the early '70s, after a film played for several weeks in theatres and one time on a television network, the only way to see it was to hope it would appear on a local television station's *Late Show* or at a campus film society. Hollywood earned the bulk of its money from play in theatres; television, even with a sale to one of the three major US networks (NBC, CBS or ABC), accounted for no more than a tenth of total revenues.

In contrast today after theatrical playoff, the products of Hollywood's movie factories play around the clock on cable television and can be bought or rented from video stores which seem to have sprung up on every corner. Then they appear on network television and regularly on independent television stations. The North American public now enjoys the greatest access to feature films in the medium's history.

Below I will examine how the 'new' television technologies have brought about the extraordinary changes in how Hollywood movies are sold and argue that during the '80s the major companies of the film industry have skilfully learned to use alternative television technologies to make more money from their feature films than ever before.³

In the late 1970s the noted American consulting firm, Arthur D Little, Inc, studied the film industry and predicted that there would probably be no more movie theatres by 1990. The new television technologies would keep everyone home. Instead, during the 1980s more new movie theatres have been built, creating more theatrical screens for films in the United States since any time since the Golden Age of Hollywood. Why? Because the movie theatre remains the key to introducing a feature film to its potential audience. If the movie reaches the top ten in terms of box office take, it invariably reaches the same ranking for monies generated by home video, cable television and other television technologies discussed below. If it is not popular in theatres, then it invariably earns far less.

In the current multiplex world, during the

summer season (beginning mid-May and ending early in September) and during the Christmas/New Year holidays, the Hollywood majors unleash their hoped-for hits to two thousand or more screens at a time. Through widespread television advertising they seek to create blockbusters which will generate revenues in excess of ten million dollars a week. This system of theatrical release requires more and more theatres so Hollywood can take full advantage of the economies of television advertising. Even though the cost of marketing a film can often exceed ten million dollars, if it is spread over more and more theatres, the costs per theatre per film remain relatively low.

The Hollywood majors and the leading chains of theatres engage in a never-ending tug of war. The studios' revenues come from a percentage of the take at the box office. This fee is negotiable. To create 'profit centres' in which the studios cannot share, theatre owners spend considerable time and effort hawking popcorn, soft drinks and candy. One simple reason: three cents worth of popcorn can be sold for one dollar. In the mid-1980s theatres were ringing up more than 300 million dollars per year just from popcorn. A well-run concession stand could generate at least one dollar of sales and as much as 75 cents of profit for each and every ticket buyer who entered the theatre.⁴

The simple economics is that a multiplex with twelve screens is four times more likely than a triplex to book a hit picture. An unexpected blockbuster can be shifted to the largest auditorium in the complex, a less popular film to a smaller one. But the multiplex world, until recent times, has been a barren experience, with

² My selected approach leaves out considerations of experimental, documentary and political film and video. But the Hollywood feature film industry still produces a far greater economic impact than these other areas of film production, distribution and exhibition.

³ The majors are Paramount, Warner Brothers, Universal, Disney, MGM/UA, Columbia and Twentieth Century Fox. In 1987 they drew in more revenues from movies than any year in history.

⁴ *Los Angeles Times*, November 3, 1986, VI, pp 1, 4; *Wall Street Journal*, August 21, 1986, pp 1, 14; *Variety*, May 6, 1987, pp 227, 231; *Variety*, July 1, 1987, pp 1, 31; Peter J Dekom, 'The Motion Picture in 1987: A Study in Economic Turmoil', *American Premiere*, vol 8 no 1, Spring, 1987, pp 9-15, 32.

84 postage stamp-sized screens. To bring back filmgoers a Canadian firm, Cineplex Odeon, has spent millions of dollars publicising its return to the elegance of the movie palace experience. Garth H Drabinsky, its workaholic president and founder, believes in wide, comfortable seats, real butter on the popcorn, and standards for sound and image long forgotten.

Drabinsky also seeks to control the movie theatre market in the United States and Canada. To do this Cineplex Odeon has purchased theatres from Washington State to Washington DC, from New York City to Los Angeles. In less than a decade Cineplex Odeon became one of the three largest theatre chains in the United States and Canada, and seems on the verge of becoming the largest.⁵

To expand so rapidly Drabinsky needed money. He raised millions by selling a large share of his company to MCA, the parent company of Universal Pictures. This has given a Hollywood major direct access to many of the most profitable theatre complexes in the United States and Canada, creating a system of vertical integration not seen in the United States since before the 1949 Paramount decrees. In addition Cineplex Odeon has raised ticket prices, to seven dollars, sparking mass picketing in front of a number of its houses in New York City.⁶

In 1978 theatres supplied more than three-quarters of the revenue for an average Hollywood feature film. Today, despite the increase in their number, theatres supply less than half. The reason is the extraordinary rise in the contributions coming from pay-television and home video.

The data seem incontrovertible. In 1980 the Hollywood majors collected some twenty million dollars from world-wide sales of video cassettes. In 1986 the figure topped three billion dollars, making home video the equal of theatrical box-office rental take in the United States. In other words, in 1980 an average film took in one per cent of its revenue from home video; today that share tops 33 per cent.

In 1976 Sony introduced its half-inch home video cassette recorder (VCR) into the United States. Originally priced at more than 1000 dollars, an equivalent model today costs just over 300 dollars. An enthusiastic public snapped up so many machines that by 1987 fully one-half of

American households were equipped to tape off the air and run pre-recorded tapes. In the beginning, Hollywood loathed the new machine, arguing that VCRs stole precious dollars from the box-office. But during the 1980s, it found a way to exploit the new technology.

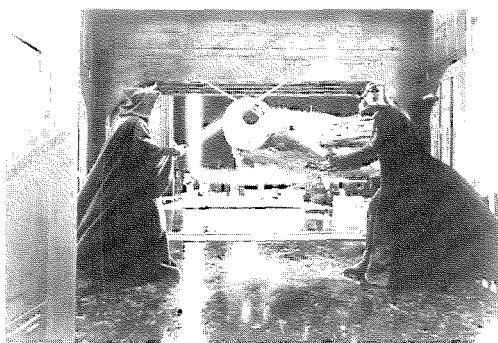
During the first two years of the decade the studios tried to sell pre-recorded movies to the public for 60 dollars and up, thinking only diehard fans would want to run tapes at home. Meanwhile entrepreneurs with no connections to the movie business began to buy multiple copies of pre-recorded movies and offer them for rent. The terms varied, but usually one anted up ten dollars to join a 'club' and then rented a tape (from a selection which might reach five thousand) for one or two dollars per day.

By the mid-'80s stores renting video tapes seemed to be popping up everywhere in the United States. Grocery stores, convenience chains, gas stations, dry cleaners and even in some locales, pizza delivery services, rent videos. Consider the case of Erol's in Washington, DC. Twenty-five years ago Erol Onaran emigrated to the United States and opened a television repair shop. In 1980 he began to rent tapes. In 1982 there were seven stores; in 1985 fifty outlets; today more than one hundred. His revenues from video rental alone now exceed one hundred million dollars per year.

The majors did not like sharing the market with video stores, but through judicious release and initial high prices for sales (to video rental stores) and then later lower prices for retail customers, Hollywood has adapted. Currently about 400 prerecorded cassettes are released each month in the US, of which 70 per cent are Hollywood feature films. The hit films among them can generate massive video sales. In 1986 Paramount's *Top Gun* brought in 82 million

⁵ In December, 1987 Cineplex Odeon announced plans to expand to England with about one hundred screens over the next three years. See *Variety*, December 2, 1987, pp 1, 109.

⁶ *Variety*, November 25, 1987, pp 7, 32; *Variety*, December 2, 1987, pp 7, 15; *The Washington Post*, December 16, 1987, pp A1, A22; Mara M Balsbaugh, 'Cineplex Odeon Corporation', New York, Smith Barney Research, 1987, pp 3-33; *Variety*, October 14, 1987, pp 6, 32; Jimmy Summers, 'Cineplex Odeon Launches A Dazzling New Flagship', *Boxoffice* September, 1987, pp 8, 10, 12, 16, 20; *The Wall Street Journal*, May 7, 1987, p 59.



Star Wars (left): a flop on CBS. *Predator* (right): a hit for Fox TV?

dollars to the parent company in theatrical rentals; tape sales generated an additional 40 million dollars.

Unfortunately some films sit on the studio shelves because of ownership disputes. Everybody agrees that the Bob Hope-Bing Crosby famous *Road to . . .* pictures would sell as videos. Paramount, which produced them, cannot determine who controls the rights and thus withholds their release. Conversely, a growing number of films only become hits when released as videotapes. For example, Brian De Palma's *Scarface* did reasonably well in theatres in 1984, but later topped the VCR rental charts, gaining a fresh, new audience.⁷

In 1983 the US pay-cable network, Home Box Office, seemed to be on the verge of taking over Hollywood. Pay television's share of the film industry's revenues had increased some eleven-fold in five years, accounting for one-seventh of an average film's take. But in recent years home video release has preceded the pay-cable 'premiere' of most films, and so pay television revenues have begun to level off. As home video has grown, it has crippled pay-cable, not the theatrical box office. Too many consumers prefer to rent the cassette and not watch feature films on HBO and its rivals, Showtime and The Movie Channel.

Time, Incorporated created Home Box Office in 1972. By charging cable TV subscribers a fee of about ten dollars for the right to watch a month's worth of recent Hollywood motion pictures uncut and uninterrupted by advertisements, HBO picked up ten million subscribers in a matter of years. For the first time

in the television age a way had been found to make movie fans pay up front for living room viewing.

Despite the recent purchase of the rival pay-cable networks Showtime and The Movie Channel by National Amusement's Viacom, a giant media conglomerate headed by movie exhibitor Sumner Redstone, HBO continues to dominate the market. And most observers think it will continue to do so through the end of the decade because in 1987 HBO signed Paramount Pictures to an exclusive contract. Paramount Pictures, the hottest studio of the mid-1980s, has delivered hits from the Melrose Avenue studio with a consistency unseen in decades: the *Star Trek* films, *Top Gun*, *Crocodile Dundee*, *Beverly Hills Cop II*, *The Untouchables*, *Fatal Attraction*. HBO is so confident that it has even begun a third service, Festival, for consumers who reject HBO because it shows 'R' ('restricted' to over-18s on grounds of sexual or violent content) rated films. At the end of 1987 Festival had an estimated 50,000 subscribers in 100 cable systems. This is a tiny fraction of HBO's fifteen million subscribers, but Time, Inc claims that the

⁷ *Video Marketing Newsletter*, vol 8, no 23, pp 1-7; 'Company Profiles', *Washington Business Journal*, Third Annual, 1987, p 30; Edmond M Rosenthal, 'VCRs Having More Impact on Network Viewing, Negotiation', *Television/Radio Age*, May 25, 1987, pp 37-39, 68-70; *Variety*, March 25, 1987, pp 41, 42; *Variety*, November 19, 1986, pp 75, 107; *Variety*, December 10, 1987, p 44; *Variety*, May 20, 1987, pp 40, 80; David Hajdu, 'Why Some of Your Favorite Movies Aren't on Cassette Yet', *TV Guide*, May 23, 1987, pp 39-40; Jim Bessman, 'Video Takes Over Main Street', *Video*, May, 1987, pp 70-72, 127.

86 new service needs only a half million to sign up before it can begin to show a profit.⁸

During the 1970s the transmission of a feature film on ABC, CBS or NBC provided its sole significant additional earnings. Not any more. With repeated showings on pay-cable and home video, the number of theatrical features transmitted on network television is now at a low unmatched since Twentieth Century Fox and NBC established *Saturday Night at the Movies* 25 years ago.

Yet more 'movies' are shown on American television networks than ever. These are features made for initial showings on television. These relatively low-budget productions (two to five million dollars for a 90-minute film) thrive by promoting instant controversies and in rare cases provoke serious discussion of important ideas (for example the effects of nuclear war in *The Day After*, the most popular TV movie ever shown in the United States).

But blockbuster theatrical features fare poorly on network showcases. When CBS aired *Star Wars* in February, 1984, that all time blockbuster looked to be a sure-fire ratings hit. As such, the network doubled its prime-time advertising prices. But to nearly everyone's surprise *Star Wars* was beaten in the ratings by *Lace*, a steamy made-for-TV movie which cost only three million dollars to make, less than half what CBS had paid to rent *Star Wars*.⁹

The final run for a movie is presentation on a non-network television station. Today this is a very important market since the number of over-the-air independent stations has doubled during the '80s and the cable independent service, Ted Turner's WTBS, is the most watched of all cable selections in the United States, reaching some 40 million households. It takes a couple of years for important feature films to make it to independent television (less for box-office failures), but then the film is shown over and over again.

Ted Turner's SuperStation has mined gold with such a strategy. Turner took a typical independent station, and beamed it to North American households via cable television. Fully half of WTBS's time is filled with old films. In 1985 Turner purchased MGM, not for its current productions, but for access to its library. He so wanted the old films that he paid far more than he could afford and had to sell the remainder of MGM back to airline magnate and Las Vegas

lord Kirk Kerkorian a year later. The television power Lorimar-Telepictures, producer of *Dallas*, took over what remained of the fabled MGM back lot as part of this series of exchanges.

Turner's SuperStation is no different from over-the-air independent stations found in all sizable US cities. A quarter of their average television broadcast day is devoted to rerunning Hollywood features films. Indeed, a vast array of the Hollywood sound film archive has become the stuff of everyday experience. Few US viewers lack round-the-clock access to repeat showings of the best and worst Hollywood has offered during the past 50 years.¹⁰

And there are more changes on the horizon. Pay television operators want to collect as much as possible from hit movies. So they are working up a system to premiere blockbuster features on a one-time basis *before* the film reaches the video stores. This 'Pay-Per-View' system offers films fresh from successful theatrical runs for five dollars for a single viewing; otherwise, viewers must wait several months to rent them and even longer to see them on HBO or Showtime. This new means of presentation intends to milk even more dollars from every hit Hollywood manages to create in theatrical run.

In 1985 Showtime launched Viewer's Choice. Today there are four more Pay-Per-View services. All charge an average of five dollars to watch a film at home before its release to the home video market. The problem is that Pay-Per-View requires a technologically advanced cable system with what are called addressable converters. Only with these devices in the home, plus the appropriate wiring for transmission plus

⁸ Rich Zahradnik, 'Great Expectations: One More Time', *Channels*, vol 7 no 11, December, 1987, p 117; Peggy Ziegler, 'HBO, Showtime Trade Jobs Over Paramount Film Deal', *Multichannel News*, July 27, 1987, p 8; *Variety*, July 29, 1987, p 102; John Montavalli, 'In Search of a New Strategy', *Channels*, vol 6 no 11, December, 1986, p 80.

⁹ See Douglas Gomery, 'Hollywood's Business', *The Wilson Quarterly*, vol X no 3, Summer, 1986, pp 53-56 and *Variety*, July 15, 1987, pp 37, 54; *The Wall Street Journal*, February 21, 1984, p 30.

¹⁰ James Traub, 'Growing Up Is Hard to Do', *Channels*, November, 1987, pp 22-23, 25-27; Alex Ben Block, 'Having It Both Ways', *Forbes*, July 27, 1987, pp 42-43; Scott Ticer, 'The Ted Turner Show', *Business Week*, October 26, 1987, p 96; Robert Sobel, 'Indies: The Price Is Right for Movies and So Are Ratings', *Television/Radio Age*, July 20, 1987, pp 46-48, 72-73.

computers for billing, can the cable operator turn 'on' and automatically bill an individual customer. But in the United States Pay-Per-View seems to be the most important thrust of the new television technologies because it provides entrepreneurs with a lever to extract more money.¹¹

The United States is not the only market Hollywood serves. At no time in recent history have overseas earnings been better. Although this doesn't represent the use of new technology, it does place more dollars into the pockets of the major companies. In the United States *Children of a Lesser God* (1986) was a mediocre performer earning only sixteen million dollars at the box office. However, by the time its foreign run has been completed, *Children of a Lesser God* will have brought in close to double that amount from rentals overseas. Warner Brothers' *Police Academy* (1984) earned thirteen million in its domestic run, and double that overseas. More often than not hits in the United States transfer well abroad. The leaders for overseas success continue to be Universal's *E.T.* (1982) and *Jaws* (1975), both also among the greatest hits in Hollywood history.¹²

As both video and cable, plus direct satellite transmission, spread throughout the world Hollywood will push to peddle more and more of its feature films through these new media. One hindrance is piracy. The Motion Picture Association of America, the organisation which sets the ratings for movies in the United States, is spending much time and money (financed by Hollywood) to try to convince foreign governments to clamp down on copyright violations.¹³

Whatever the new technologies, the business of Hollywood is making the most possible money. It will do this by trying to formulate policies for technological exploitation to make optimal use of what has come to be called admission price discrimination. This system seeks to segment potential customers and have them pay as much as possible to view the film. In the United States this used to be done with theatres by having various runs and then charging top price for first run, less for second run and even less down the line. (In the 1930s the city of Chicago had a twelve-run system.¹⁴)

The first run for the 1980s is almost any

theatre. (Nearly all in the United States today are first run.) Then comes Pay-Per-View (where available), home video, pay-television, network television and finally independent television. The customer anted up less and less down the line until he or she can watch for 'free' on network and independent television. (Of course, the viewer does pay through the advertisement costs added to the price of products.)

Thus, although a number of new television technologies deliver and present movies to segmented paying publics, the Hollywood-made feature film remains the dominant cinematic form. Indeed, through ownership Hollywood firms directly participate in the profit from theatres and television stations. In addition to the investment of MCA's Universal Pictures in Cineplex Odeon, both Paramount and Warner Brothers also own sizable theatre chains.

But consider the case of ownership of television stations. Rupert Murdoch created the United States' first vertically integrated movie-television company when he bought Twentieth Century Fox in 1985 and combined it with Metromedia's chain of six big-city independent television stations. This means that a Fox-made film such as *Predator* (1987) or *The Jewel of the Nile* (1985) can be shown by the Fox television station as soon as it is in the best interest of the company since all monies generated are kept in the corporate

¹¹ John Montavalli, 'Hollywood Execs Laud PPV, But Decry Lack of Cable Commitment', *Cablevision*, April 27, 1987, pp 15-17; Peggy Ziegler, '1987 Shaping Up as the Year Pay-Per-View Became a Business', *Multichannel News*, vol 8 no 24, June 15, 1987, pp 1, 35; *Broadcasting*, November 9, 1987, p 32; *Variety*, August 12, 1987, pp 41, 50.

¹² *New York Times*, September 28, 1987, pp D1, D8; Jason E Squire (ed), *The Movie Business Book*, Englewood Cliffs, New Jersey, Prentice-Hall, 1983, pp 123-131; Harold L Vogel, *Entertainment Industry Economics*, New York, Cambridge University Press, 1986, pp 50-54.

¹³ *Variety*, September 30, 1987, pp 2, 140; *Variety*, September 16, 1987, pp 4, 20; John Hanrahan, 'Valenti: Video Piracy Cost Industry \$1 Billion Annually', *The Hollywood Reporter*, September 28, 1987, pp 1, 12; *New York Times*, December 28, 1987, pp D1, D3; David Bollier, 'At War With the Pirates', *Channels*, March, 1987, pp 29-35.

¹⁴ For a more complete analysis of how admission price discrimination operated in the 1930s and 1940s see Douglas Gomery, *The Hollywood Studio System*, New York, St Martin's, 1986, pp 14-19.

88 family. Disney and Universal also own television stations.¹⁵

In the early 1970s there seemed to be hope in some quarters that with the advent of these technologies Hollywood would lose its long held centrality in North American culture. This has not happened. Instead Hollywood has gained even more power and profits. Today's studio

executives like Paramount's Frank Mancuso and Columbia's Dawn Steel have far more power than their colourful predecessors of the 1930s like Harry Cohn or Louis B Mayer. The major Hollywood studios not only control the movies we see in theatres, but also those shown on pay-television, home video, network television and independent television. And there is the promise of even more riches from foreign markets and Pay-Per-View. Hollywood in the '80s provides a case study in how one industry, by skilful innovation within distribution and exhibition, can position itself to make more money than ever before.

¹⁵ See my more complete analysis in 'Vertical Integration, Horizontal Regulation - The Growth of Rupert Murdoch's Media Empire', *Screen*, vol 28, no 4, May-August 1986, pp 78-87.

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'FAST FORWARD'

SIMON FRITH
REVIEWS A HISTORY
OF THE VCR

The first video cassette recorder to be marketed in the USA was Cartridge Television Inc's Cartrivision, which went on sale in June 1972. It came complete with a catalogue of 111 black cassettes (for sale only) of programmes such as *Erica Wilson's Basic Crewel* and Chekhov's *The Swan Song* ('the first dramatic work made expressly for cartridge television') and 200 red cassettes (for rental only) of Hollywood films like *Casablanca* and *Dr Strangelove*. The movie box had a locking device which made it impossible to rewind. Only retailers had a rewinding machine, and this was equipped with a counter so that every resetting was noted – Hollywood studios weren't about to change the principle that they 'lend' movie prints and take a cut of *every* showing.

In the event, Cartrivision was a bit of a flop. Customers were much more interested in the red than the black cassettes and soon found their disadvantages. As James Lardner writes, 'if a screaming infant summoned a viewer away from his Cartrivision set in a hurry and made him miss a few minutes of a movie, there was no way to recapture those minutes without a return trip to the store – and no way for the store to rewind the cassette without reporting a fresh transaction to the Cartridge Rental Network.'¹ Further disaster struck in November 1972, when the company's tapes 'spontaneously began to decompose'. By mid-'73 Cartridge Television Inc was filing for bankruptcy and the video boom, which began

with the launching of Sony's Betamax in 1975, was to be entirely dependent on Japanese hardware.

James Lardner is a staff writer for the *New Yorker* and his study of the video cassette recorder has all the virtues and faults of a *New Yorker* piece. It is well written and well researched, entertaining and informative, but depends for its impact on a familiar narrative of heroic capitalist endeavour (which Lardner uncomplicatedly celebrates) and behind-the-scenes skulduggery (which Lardner doggedly uncovers). It is so detailed that it is sometimes difficult to decide what Lardner is telling the story for. But the Cartrivision fiasco captures his main concerns – the Japanese takeover of the American domestic electronics industry; Hollywood's attempt to keep financial control of the new medium; the way in which consumer preferences can have quite unexpected consequences for the leisure industry.

From a consumer's point of view the history of technology always has the same pattern. We read of new devices that cost huge amounts of money and seem to have no immediate purpose; we follow reports of the prices coming down and domestic value going up; we see or hear the

¹ James Lardner, *Fast Forward: Hollywood, the Japanese and the VCR Wars*, New York and London, WW Norton and Co, 1987.

machines at work for richer or more foolish friends; we find ourselves thinking, one day, 'if only *I* could do that', and then the price or rental costs suddenly seem right, we get the equipment for ourselves and soon can't live without it. I can remember my parents moving through these arguments on the way to our first TV set; I've gone through them for audio and video cassette machines; I've almost reached the final step in purchasing a CD player; I'm three-quarters of the way to a telephone answering machine.

What I'm describing here is obviously the creation of 'false' needs – a huge marketing campaign lies behind my feeling that, yes, I should really be listening to compact discs. But as Lardner makes clear, such successful manipulation of the market is a fraught process, a struggle in which there are as many losers as winners and in which the most astute operators are those who most quickly *respond* to market choice. Lardner notes that one casualty of the VCR wars was therefore Sony itself, which had to pay a 'pioneer tax' for having started out with Betamax – it was quickly apparent to Sony's rivals that the original Beta machines were limited in consumer appeal by their one-hour format; when RCA did a deal with the other Japanese electronics firms to market VHS players it was on the promise that VHS tapes would last three or four hours – 'RCA wanted a machine that could record a football game.' And one fascination of Lardner's book is his description of the dialectics of Japanese electronics research: the technicians come up with a new device, the marketing departments seek to sell it in the US, learn what consumers make of it and return to the technicians with modifying instructions – a machine with longer playing time, a fast forward mechanism, etc.

But none of the electronics companies did very systematic market research (it is not clear that such research is valuable in this context, anyway – market data is useful in revealing what people do do, not what they might), and the most significant use of the VCR turned out to be neither time-shifting nor 'librarying' (to 'library' was to build up a collection of videotapes, something in my experience done only by media and film studies lecturers), but film rental. Lardner focuses on two aspects of this. First, he looks at the way video rental in the USA (as in the

UK) flourished as a particular sort of small business – it didn't need much capital, there was an obvious market gap, it could operate at a local level (and the more 'hick' the setting, the more need there was for a video store). It was partly because video store owners and customers so obviously stood for the American entrepreneurial ideal that they were in the end able to outlobby the Hollywood studio interests – their lobbying campaign may have been financed and run by the Electronics Industry Association of Japan, but the Motion Picture Association could hardly play the xenophobic card against mid-Western 'mom and pop' stores.

Hollywood wanted to make copying of films illegal, but what was at stake was not moral principle but money, and what the studios were really after was control of the rental business plus some sort of royalty from the sale of VCR machines and tapes (the campaign exactly paralleled record company campaigns on audio taping). The problem was that two kinds of property right were in conflict: copyright holders' right to exploit their 'creativity', and VCR owners' right to do what they liked with their machines. The subsequent legal battle, Lardner's second interest, revealed the contradiction to be at the heart of American intellectual property law. The lower court's robust populist decision for Sony was overturned by a higher court's supercilious finding for MCA/Universal – 'It is noteworthy,' Judge Kilkeny wrote, 'that the statute does not list "convenience" or "entertainment" or "increased access" as purposes within the general scope of fair use.' But his ruling was, in turn, set aside by a split Supreme Court, which recommended the issue be considered by Congress. It was there that 'consumer' and 'small business' interests defeated the film industry.

It was a pyrrhic defeat. In the last few years the spread of VCRs has given the studios a huge new income just from the sales of single film copies to video stores, and the video market has given a new lease of commercial life to old films and opened up a demand for 'sell through' tapes – home study videos like *Jane Fonda's Workout* and 'kid vids'. It is calculated that there are, now, as many video outlets as cinemas in the USA, that the video return will soon match the theatre takings. The small rental concerns that were so

92 important ideologically for the electronics industry are now being pushed out by chains and department stores. The only corporate victim of the video boom has been cable television – as in Britain; video rental remains a much more popular way of home film viewing than cable rental, which has its own message about what sort of ‘property’ films are seen to be.

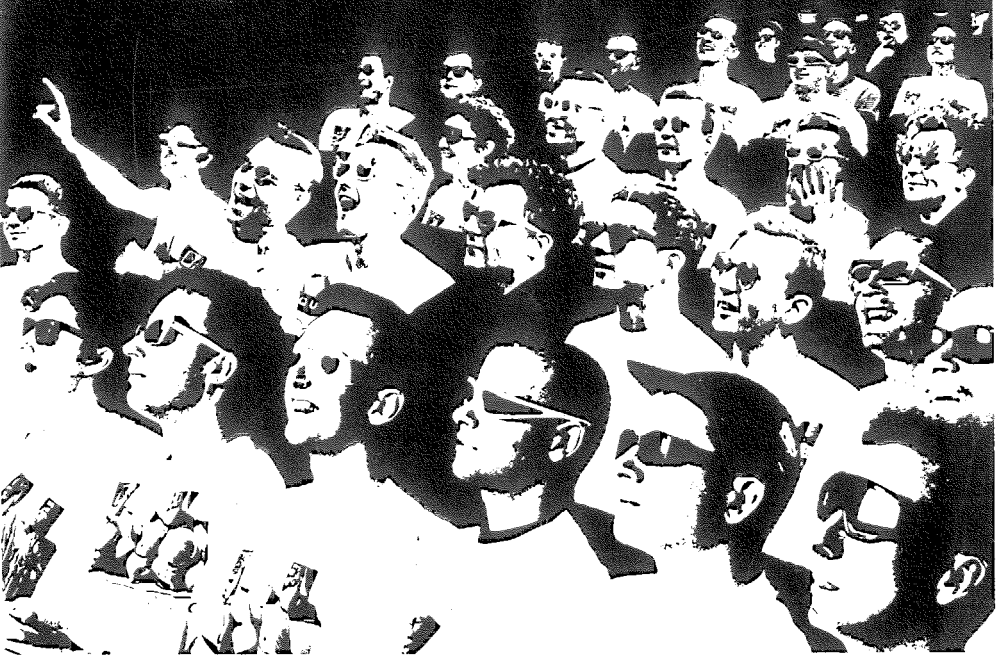
The message of Lardner’s book is that while the leisure corporations make huge profits from their market, they remain baffled by it. People at play just don’t act *rationally*. The funniest quote is from one of the pioneering video store operators, Frank Barnako Jr: ‘I saw what a difference a VCR in my home made for me and

my wife,’ he said. ‘A VCR let us maximise the value of those hours of the day that we decided to devote to watching television. I guess that after you get above thirty thousand dollars a year or so, you should operate on the assumption that time is your most valuable commodity. If you have a certain hourly value to your employer, you should have at least that hourly value to yourself in your off time, and if you choose to segment some of your off time into recreation, and if that recreation has a component of television watching, it shouldn’t just be catch as catch can. And I saw that and I said, “Gee, if I value my own time like that, I’ll bet there are others like me!”’

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S Q U A R E



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P E G

SINN FEIN AND VIDEO

NOTES ON A POLITICAL PEDAGOGY

BY JOHN ROBERTS

Over the last few years the Education Departments of Sinn Fein North and South have become increasingly involved in the pedagogic possibilities of video. Their aims are threefold: the development of internal structures of Republican socialist education within the party; the circumvention, in the South, of the censorship powers of the notorious Section 31 of the Broadcast Authority (Amendment) Act, 1976 and, paradoxically, the development of 'media skills' that will allow the party to enter more fully the competitive consumerist politics of the bourgeois democratic process. In broad terms such moves represent deep and long-range transformations within the party post abstentionism and the clandestine nature of the organisation. Sinn Fein in a sense are having to change those illicit reflexes of mind that have been borne of long term isolation. It's a shift that spokesman Danny Morrison has described as a movement from a party selling newspapers and raising money for the Provisionals on the street and in the home, to an 'open political organisation'¹ that seeks to *capture* traditional Republican support lost to Fianna Fail and the Social Democratic Labour Party.²

The development of socialist political skills to compete with bourgeois political ones is a process subject not only to the organisational strengths of the working class and its leadership. It also depends on the nature of the bourgeois democratic process itself. The 'exceptional' political conditions of Ireland and Northern Ireland – the implicit censorship of the North and the explicit censorship of the South – make any real short term advances for Sinn Fein fraught with difficulties. All the more so in the wake of the Enniskillen bombing. The

'unmitigated disaster' of Enniskillen, to quote Morrison³, has licenced the crown forces in the North and the Free State government to further 'de-humanise' the Republican struggle and 'expedite', to quote Sinn Fein President Gerry Adams, 'increased repression'⁴. The immediate legislative consequences of the bombing are now clear: ratification of the Extradition Act and renewal of Section 31 (which, with a great deal of cross-class support for its repeal, had looked like being amended) in the Republic; the permanent establishment of the 'draconian powers' of the Prevention of Terrorism Act in the UK; and a general increase in a British sponsored anti-Sinn Fein campaign North and South under the auspices of 'security'. This was borne out recently when a Cork Sinn Fein organiser was jailed for five years, under the Offences Against the State Act, for selling as an 'incriminating document' an IRA poster captioned with 'The IRA Calls the Shots'.

¹ *The Tasks Ahead* – Danny Morrison and John McCluskey, video of two addresses to a Sinn Fein meeting in Longford, November 1986.

² Fianna Fail is the Republican Party which emerged following the civil war. Founded by Eamon De Valera in 1926 it originally represented the interests of small manufacturers and distributors. It is currently in power under Charles Haughey. The Northern Irish Social Democratic Labour Party (SDLP) was founded in 1970 in the wake of the civil rights marches and out of the ruins of the old National Party. They represent a partitionist/reformist response to the six county state. They are predominantly middle-class in membership and support.

³ Interview with Danny Morrison, *New Statesman*, November 20, 1987, p 19.

⁴ Interview with Gerry Adams, *An Phoblacht/Republican News*, November 19, 1987, p 3.

Sinn Fein in the South has no illusions about the limitations of video in the face of Section 31.⁵ Despite the development of production techniques within the organisation and the building up of video libraries, the audience for such work remains on the whole the membership itself and its supporters. This, notwithstanding the 'exceptional' circumstances of the Irish struggle, says nothing new about restrictions on the distribution of political videos. But in the UK there is at least a potential production link-up between independent video and film and mainstream broadcasting – albeit now highly attenuated – in the shape of Channel Four's 'open' structure policy. There is no comparative access to RTE (Radio Telefís Éireann) for the Republican left. In these terms we are talking about a very different political and cultural climate; progressive alliances based on the commitments of a left intelligentsia well-placed within the media are just not available. In fact it is the absence of conditions of continuity for the growth of a modern and combative left intelligentsia (through the long-range effects of migration and the splitting off of Republican aspiration from socialist analysis and activism which James Connolly fought so hard to oppose) that accounts in part for the degree of legitimisation Section 31 finds in the Free State.⁶

Although it may seem an inflated comparison, Sinn Fein's use of video in the South resembles the anti-colonialist struggles of Third World countries, as part of an ideological contest fought *on the ground* with few resources. If this says something about the global nature of anti-imperialist struggle, even under the exceptional circumstances of mass consumerist economies, it also points to the particular demands on such struggle today to build up educational work through media technology as an inseparable part of articulating and carrying those struggles forward. As a direct response to state censorship within the politics of a colonialist situation, Sinn Fein's use of low-level technology has a progressive role to play in both establishing self-identity and disseminating information efficiently and providing the necessary conditions whereby members and supporters can raise political consciousness in pedagogic exchange. If it is wrong, in the absence of political advance, to overestimate the socially dynamic role of such a

process – as has been argued for the democratic potentiality of video in a number of Third World revolutionary situations⁷ – it would be equally wrong to assume that Sinn Fein are simply *using* videos. Videos have become one of the means by which a predominantly working class organisation can develop its political skills.

Paulo Freire's notion of 'learning situations' based on dialogical relations⁸ is perhaps the best way of describing these initiatives. As Jim Monaghan, an Education Officer for Sinn Fein in Dublin has said: 'The main point we feel is that videos provide an easy and useful way to hold educationals at *cumann* [group] level which everyone should gain from, and which require very little input from an educational officer, who might feel otherwise inadequate or unable to run educationals or give satisfactory papers. And that videos should also be thought of as something individual members can borrow, watch in their own time, or watch with a few friends, and thus disseminate the nature of our struggle and of Sinn Fein with a view in the longer run, to recruitment and generating new *cumann* in areas where we have supporters but no organisation.'⁹ The recognition of pedagogy as practice here clearly points to an organisation that is building out of a Republican tradition where not only cultural politics but politics itself has taken a back seat in the face of 'physical force'

⁵ The difficulties that Sinn Fein face under the powers of Section 31 were given an absurd twist recently when a song from Christy Moore's album *Unfinished Revolution* was banned by Radio Telefís Éireann because Moore's sister, who is in Sinn Fein, was singing in the chorus! This is a fairly trivial example, but it gives an indication of the extent to which Conor Cruise O'Brien's revamped bill will find its targets. For recent information on Section 31 see the International Federation of Journalists report, *Censoring 'The Troubles': An Irish Solution to an Irish Problem?*, Brussels, May 1987.

⁶ For an historical discussion of the weaknesses of left intellectual culture see Bill McCormack, *The Battle of the Books*, Dublin, 1986.

⁷ See Dee Dee Halleck, 'Nicaraguan Video: Live from the Revolution', *Making Waves: The Politics of Communication*, *Radical Science* 16, Free Association Books, London, 1985.

⁸ Paulo Freire, *Pedagogy of the Oppressed*, Harmondsworth, Penguin 1972. For a good (if strangely unacknowledged) update of Freirian-type pedagogy see David Lusted, 'Why Pedagogy?', *Screen* September-October 1986, vol 27 no 5, pp 2-14.

⁹ 'Notes on Use of Videos', Sinn Fein internal memo.

96 traditionalists. With the rise of the right in the IRA in the 1940s and '50s (after the defeat of the socialist policies of Saor Eire in the '30s) the legacy of Connolly, Liam Mellows and Frank Ryan was subjugated to the armed struggle.¹⁰ In short, what Sinn Féin's use of video represents is the emergence within the Republican socialist movement – after the civil rights marches, the rise of the new Northern leadership and the recent influx of feminists and activists with Trotskyist backgrounds into the organisation – of a modern cultural politics. Through it the development of Republicanism as a broad-based movement has displaced the old-style exhortative and melancholic forms of nationalism that dominated the socialist down-turn in the '50s. (This is why a number of commentators have been quick to interpret – erroneously – the Enniskillen bombing as an implicit attack by the IRA leadership on the re-politicisation of the struggle in the new Sinn Féin, and its generally slow results.) As Gerry Adams has described these political changes: 'Republicanism is a very potent force in Irish politics but the vehicle of organised republicanism is still weak organisationally and our underdevelopment in this respect is something which we recognise and which we are constantly addressing. . . . There is nothing which concentrates the mind of a political party as much as an electoral campaign and while we do not restrict ourselves to electoralism – indeed we see it merely as one facet in a many-faceted struggle of campaigns, street agitation, cultural resistance, publicity work and education – our electoral successes have played a major role in changing the nature of Sinn Féin.'¹¹

The production of videos can be divided into four categories: material made on community issues, videos of speeches at the Ard Fheis (the annual party conference) and internal policy discussion groups, election videos and 'training videos', in which prospective Sinn Féin councillors, or TDs (MPs), are asked hostile questions in controlled situations. The second and fourth categories are obviously for internal consumption only. The community issued titles are aimed predominantly at the Republican community itself (pubs, clubs, meeting halls and homes) and the video for the Westminster election (scripted by Danny Morrison) was shown on the BBC under their equality of

political representation clause. The technical quality of these varies greatly, the election video being the most sophisticated or 'professional' in structure, given the demands of mainstream broadcasting. Still, as Seamas Keenan, Publicity Officer for Derry Sinn Féin has said, Sinn Féin has no 'policy' on video.¹² Given the lack of resources, and the political demands on activists from other areas (the Sinn Féin paper *An Phoblacht/Republican News* is still sold on the streets) things remain uncoordinated, reflected in the fact that the party does not have the capacity to copy and distribute material on a wide basis; videos are not extensively available for individual consumption. Nevertheless, both Keenan and Monaghan see the need now for autonomous groups to be set up, North and South, that will provide the basis for a broad cultural and educational programme. Moreover, it will also allow Sinn Féin to take over some of the propaganda functions that have been provided by independent video- and film-makers sympathetic to the Republican cause.

Sinn Féin's use of low-level technology is largely about establishing the necessary conditions through which transformative forms of knowledge production and exchange can take place. As a result there is a sense that traditional literary forms of Republican pedagogy – the Romantic, conservative organicism of Pearse and the legacy of the Irish Republican Brotherhood – are up for scrutiny. This is not to say that Sinn Féin are less committed to the Gaelic language ('the Irish language is the reconquest of Ireland and the reconquest of Ireland is the Irish language'¹³) or that there still doesn't exist, in certain sections of the leadership, a conservative desire to restore the place of a pan-Gaelic culture after a break with Britain. But the boundaries of an 'essential' Irish identity denied by

¹⁰ Saor Eire was a left reformist movement within the IRA in the 1930s. See Sean Cronin, *Frank Ryan: the Search for the Republic*, Dublin, Repsol, 1980, for a discussion of the ideological struggles within the IRA through the '20s, '30s and '40s.

¹¹ Gerry Adams, *The Politics of Irish Freedom*, Dingle, County Derry, Brandon Publishers, 1986, p 151.

¹² Conversation with author, Derry, July 1987.

¹³ Gerry Adams, *op cit*, p 148.

imperialism, which has played such a strong part in Republican aspiration, are shifting. The link between culture and politics, nationalism and socialism, as *productive* sites of meaning (rather than the repositories of myth and allegiance) are moving hesitantly and informally into position, particularly through the work of women members who are daily confronted, through Catholic hegemony on civil matters, with the way notions of 'Irishness' are used routinely to police the working class in the South.

In the absence of effective means of self-representation through access to the media, and in the face of administrations North and South that seek to depoliticise and dehistoricise Irish history and Republican struggle as 'atavistic', the necessity for a post-Romantic cultural politics has become paramount. The mobilisation of a popular Republican socialist cultural politics will increasingly take up the foreground of ideological debate within the party. Faced with the hegemony of Anglo-American popular culture,

the working class, the unemployed and youth will not be won over to a socialist united Ireland on visions of Irish dancing and Gaelic football. The weakest chapter of Gerry Adams' *The Politics of Irish Freedom* and the weakest plank in the Sinn Féin manifesto are the ones on culture, both of which assume a wholly unproblematic notion of traditional culture within a united Ireland as morally empowered. The argument then is not to unhook the link between the reconquest of Ireland with the reconquest of the Irish language (the 'practical' recourse of a naive and imperialist internationalism) but to recognise that there *is* a conflict between nationalism and socialism in any anti-colonialist struggle conducted in an advanced Western country.

Sinn Féin's use of video as part of a 'modernisation' programme sits at the centre of this conflict, for it promises a pedagogy that not only takes on the governing cultural forms of Anglo-American imperialism and the depoliticisation of the Republican struggle within the culture generally, but those conservative forms of Gaelicism itself, those prefigurations of 'oneness'¹⁴ that undermine its socialism. If this is a big claim, particularly in the wake of Enniskillen and the temptation to retreat into the security of the Republican community, it nevertheless offers the clearest way forward for a party that now confronts the harsh realities of *political* organisation.

¹⁴ See *The Celtic Revolution: A Study in Anti-Imperialism* by the historian Peter Beresford Ellis, Talybone, Ceredigion, Y Lolfa Cyf, 1985. Ellis's Republicanism is defined principally in terms of a struggle between little nations and large multi-national states. With its independence, the author argues on p 209, Ireland will regain its identity and 'feel a oneness with its past and confidence in its future'.

VITAGRAPH, SLAPSTICK AND EARLY CINEMA

PETER KRAMER REPORTS
FROM PORDENONE

For a number of years the Pordenone Festival of Silent Film has offered a unique opportunity to reassess the history of early cinema, with extensive screenings of archive material and a wealth of formal and informal discussions. The sixth festival, held in September '87¹, focused on changing approaches to the study of early American cinema, in particular comedy and its slapstick variants. A large number of film historians, both traditional (most notably William K. Everson) and revisionist, assembled for a retrospective of Vitagraph films (1898-1925), complemented by an extensive dossier of articles and a round table discussion by the leading scholars in this field – Charles Musser, Tom Gunning, Ben Brewster, Barry Salt and Jon Gartenberg – and a 'tribute to Roscoe Arbuckle' on the occasion of the centenary of his birth (films from 1913 to 1933, complemented by video interviews with two of Arbuckle's collaborators and the presentation of the Italian translation of David Yallop's biography *The Day the Laughter Stopped*²).

With their different modes of demarcating a field of study – on the one hand the *oeuvre* of a star/director, on the other an assembly of films made by a specific production company – the retrospectives exemplified two approaches to film history. In the 'great man' conception, Arbuckle features both as comedian/star and, increasingly, as director/*auteur*. The festival's programme notes emphasised the 're-discovery of a great comic talent', whose films had been unjustly overshadowed by his unfortunate role in one of Hollywood's biggest scandals, the Virginia Rappe 'murder' in 1921. Secondly, there is the

revisionist perspective, which concentrates on the development of film form in its relation to film's industrial mode of production and wider economic and social contexts. In this instance the focus was the development of early film form as exemplified by the rather undistinguished and undifferentiated output of what the programme notes describe as America's 'most important' production company in the 'teens.

As a case study of the development of early American cinema, the Biograph company (with its star director D. W. Griffith) has, until now, served as the main subject of research in the period 1906-1913. In Pordenone the example of Vitagraph was expected to support these earlier findings and models of development. In fact, the Vitagraph retrospective turned out to be a powerful restatement of the diversity of simultaneous development and the specificity of one company's – even one director's – output. Biograph specialists like Tom Gunning were forced to revise their claims to the representative nature of their research.

A profound shift in film historical research and conceptualisation seemed warranted. This entailed a movement away from a statistical approach (concerned with the dissemination of formal and other features within the industry as a

¹ Hosted by Cinemazero and the Cineteca del Friuli in Pordenone, Italy, September 27-October 3, 1987.

² David Yallop, *The Day the Laughter Stopped: The True Story of Fatty Arbuckle*, London, Hodder and Stoughton, 1976. Yallop is mainly concerned with the murder trials and the proof of Arbuckle's innocence.



The comedian as *auteur*: Roscoe 'Fatty' Arbuckle, celebrated in Pordenone on the centenary of his birth.

whole), and towards an attempt to explain the specific features of distinct bodies of films produced by a certain company, directed by a certain director, or belonging to a certain genre. The impact of this tentative re-orientation can be measured by the fact that it was asserted, if only jokingly, that 'auteurism is back'. The possibility of analysing specific features of early directorial work, previously regarded as both undistinguished and undistinguishable, was reminiscent of the early *Cahiers* criticism of classical Hollywood cinema.

In fact, it was not (yet) the early director and the formal ideological characteristics of his or her work which was under examination at Pordenone, but the distinctive features of a company's output in relation to its marketing strategy in an increasingly competitive industry. Tom Gunning suggested that Vitagraph's return, in 1908, to an earlier, 'more primitive' mode of representation after the company's cinematic innovations in 1906 and 1907 (which were actually neglected by Vitagraph, but taken up and elaborated by Biograph, especially as regards cross-cutting) was a result of its specific marketing strategy. In this period, Vitagraph promoted its films as high quality products, often based on literary sources, the Bible or actual historical events, which imitated theatrical modes of representation³ in order to be associated with this respected middle-class institution and thus to reach middle-class audiences. This orientation towards a theatrical model also explains Vitagraph's later inability, from 1913 onwards, to use cinematic devices with any degree of effectiveness for the purpose of narration. Gunning described scene-dissection, close-ups and cross-cutting in Vitagraph films as a kind of surplus to a story narrated primarily through staging and intertitles, while Biograph had already made these devices the very motor of narration.

This analysis suggests that the development of early film form can not be seen as unified and linear. Specifically cinematic devices and narrational strategies might come into use and then be dropped again by one company, while another might elaborate them, in accordance with the various models (derived from older media) adopted to differentiate a company's product or fulfil the aesthetic and social ambitions of its

staff. Thus it is not only problematic to propose a teleological development of early film form, but also to conceptualise it as a homogeneous movement across the industry.

Comedy is one of the sites of heterogeneity in the development of early American cinema, with neither its form nor content fitting existing models of classical American cinema in the 'teens'.⁴ Research in this period has largely been based on dramatic genres and, within these genres, on feature films, while the special development of other forms, especially in the short film format, has been relatively neglected. The screening of early US comedies and the discussions surrounding them at Pordenone opened up different perspectives.

Across the various sections (Vitagraph, Arbuckle, special events, '20s classics, etc), the festival presented, albeit in a rather haphazard fashion, a brief history of American silent comedy. This history might be written using the following list of items from the festival programme as an outline, paying special attention, as I will indicate, to the changing relations between performer/star, fictional character and narrative in order to distinguish the respective bodies of films:

1) Vitagraph trick films of the early 1900s built around stop motion and super-imposition effects, the animation of drawings, the disappearance and reappearance of objects and people. The extensive use of these devices, and consequently the whole genre, seems to have become obsolete between 1908 and 1910 when a stronger interest in cinematic realism – as the duplication of reality or, rather, as a duplication of theatrical modes of representation – replaced the older fascination with the fantastic effects of the cinematic apparatus and thus with the imaginary status of cinematic representation itself. This shift seems to have occurred earlier in other production companies.

³ This includes theatrical sets using detailed and lavishly painted backdrops, the presentation of the narrative in unedited scenes making complex use of object positioning and movement within the frame.

⁴ The most comprehensive model has been set forth in David Bordwell, Janet Staiger and Kristin Thompson, *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960*, London, Routledge and Kegan Paul, 1985.

2) Vitagraph social and situation comedies starring John Bunny or Sidney Drew, each of whom played fairly consistent comic characters, mostly placed within a domestic setting and confronted with domestic issues, throughout a series of films in the first half of the 'teens. In Bunny's case there is a decisive effort to establish not only a marked stability of his character from film to film, but also an identification of the actor himself with the role he is playing by using his name for the character and featuring it in the films' titles, e.g., *Bunny All at Sea* (1912).

3) Early Keystone slapstick comedies and parodies of contemporary dramatic genres from 1912 to 1916, featuring star comedians like Mabel Normand and Arbuckle, who often appeared as a team. Again, their characters remain fairly stable from film to film, being identified with the actors whose names often appear in the films' titles, e.g., *Mabel's New Hero* (1913) and *Fatty Again* (1914)⁵. Yet, in contrast to social comedies, slapstick focuses on comic action rather than on the characterisation of its protagonists.

4) Slapstick 'comedian comedies'⁶ of the late 'teens and early '20s, more exclusively concerned with the character and performance of the star comedian than early slapstick, differentiating his/her status and performance from that of all the other actors, thus turning the star into the film's main attraction. Examples range from Max Linder's first American films in 1917 (produced by Essanay who employed him as a replacement for Chaplin after the latter's departure to Mutual in 1916) to Arbuckle's late Keystone films and his Schenck productions between 1917 and 1919, to Larry Semon's Vitagraph shorts of the late 'teens and early '20s⁷.

5) Classic comedian comedies of the '20s, more or less successfully integrating the persona, the comic and acrobatic performances of the star comedians into seriously presented dramatic story patterns taken from contemporary genres, typically realised in the feature format.

Arbuckle's Paramount features of 1920 and 1921 (produced for a release schedule of one feature every two months) cover the whole range of possibilities for the construction of feature-length comedian comedy – from the extension and sophistication of slapstick shorts into a rather episodic narrative in *Leap Year* (1921) to the

insertion of a 'tamed' comedian (playing a dramatic role more or less straight) into a conventional western plot in *The Round Up* (1920).

6) Classic sophisticated social comedy of the late 'teens and '20s in the tradition of Vitagraph's Sidney Drew comedies, but without their concentration on comic stars, relying instead on intricate narrative construction, complex characterisation, realistic situations and behaviour, one of the most famous examples being Lubitsch's *Lady Windermere's Fan* (1925).

The danger of producing an account of the history of American silent comedy along the lines of this list of six genres and sub-genres (or stages in a genre's development) is the temptation to construct the 'classics' of the '20s as a teleological realisation of the potential inherent in early cinema, a potential just waiting to be discovered and made manifest by the 'great' directors. According to this perspective, the development of slapstick leads necessarily from the 'crude', 'primitive', 'infantile' beginnings of Keystone films (produced by Mack Sennett, 'the father of American screen comedy'⁸) to the 'maturity', 'humanism', 'realism' and 'refinement' of the classic comedians of the '20s, who were mostly both performers and directors, always both 'pupils' of Sennett and 'masters' of the form he created, yet couldn't fully comprehend.

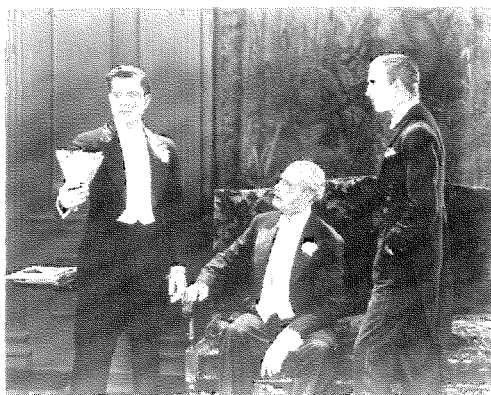
The history of social comedy could be viewed similarly, if film historians considered this genre's specific development as exceptional

⁵ Interestingly, Arbuckle's screen persona is identified with features of his body, naturally giving rise to his nickname, rather than with his personality which would be signified by use of his proper name.

⁶ A term coined by Steve Seidman in his *Comedian Comedy: A Tradition in Hollywood Film*, Ann Arbor, UMI Research Press, 1981. Seidman's analysis of the genre has been elaborated by Frank Krutnik, 'The Clown-Prints of Comedy', *Screen*, July-October 1984, vol 25 nos 3-4, pp 50-59.

⁷ After Bunny's death and Drew's departure in 1915, Semon became Vitagraph's main comic attraction, marking, after the replacement of trick films with social comedies around 1910, a second shift in the company's comedy production: from social/sophisticated to slapstick comedian comedy.

⁸ In James Agee's words from his essay 'Comedy's Greatest Era' (published originally in the September 1949 *Life*) – still the most brilliant and influential traditional account of the development of North American silent comedy.



Left, Mabel Normand in *Mickey*, 1918; right, Lubitsch's *Lady Windermere's Fan*, 1925.

enough to demand special attention. But on the whole, the development of social comedy is seen as being part of the general development of all the major genres. Slapstick, however, in almost every respect has been regarded as a special case, different from the mainstream of (dramatic) genres, although there has seldom been a direct comparison of the two and the history of North American cinema has often been written in relation to the dramatic genres only. Nevertheless, critical and historical accounts always seem to have associated slapstick, in contrast to the dramatic genres, with children and/or the working classes rather than with adults and the middle classes, with anarchistic and subversive tendencies rather than with the support of established power relations and the enhancement of political and psychic repression, etc.

This generic differentiation fits in well with the renewed interest, shown at the festival, in the heterogeneity of film historical development and the specificity of particular bodies of films within this development. To a certain extent the interest in the specific development of slapstick coincides with the revisionist historical analysis of the unique characteristics of specific production companies' output, since many companies seem to have concentrated exclusively on slapstick production. The most famous example, of course, is Mack Sennett's Keystone (founded in 1912). Other examples include Hal Roach's Rolin Company (founded in 1915) and Joseph Schenck's Comique Film Corporation which was

set up in 1917 to produce Arbuckle short films, later hiring out Arbuckle to Paramount and replacing him with Buster Keaton.⁹

Comedy studios seem to have marketed their output largely on the popularity of their stars, who displayed their special abilities and characteristics in the films in a manner often quite independent of any actual storyline. This is true even for Sennett's early group comedy approach – paradigmatically realised by the Keystone cops who never acted as individuals. Complementing the cops, Sennett featured individual stars from the start of the Keystone production, most notably Fred Mace, Ford Sterling and Mabel Normand. In their reliance on stars, comedy studios didn't differ much from the rest of the industry, but in slapstick production star performance and popularity seem to have been less balanced by other qualities and attractions attached to the films – those connected with the story and its 'proper' presentation. Thus major problems arose when, in the late 'teens, story values began to be attached to films featuring slapstick stars. This happened either when a slapstick studio changed its marketing strategy to gain a share in a more

⁹ Both Keystone and Comique were, however, parts of larger enterprises, which were mainly concerned with the production of quality features: Keystone lost its status as an independent company in 1915 when it became the comedy unit, still working in its own studio, of Triangle. Comique, on the other hand, was from the start only one branch of Schenck's production activities, the other two branches being the studios for the Talmadge sisters.

profitable market segment (feature films as opposed to shorts), or when a comic star moved to one of the major studios which, since the first half of the 'teens, had mainly been concerned with the production of quality pictures (i.e., those with high story values, literary sources, etc). In such a situation, the quality standards connected with feature film production clashed with the specific qualities of the slapstick comedians, the former being mainly concerned with narrative, the latter with a form of screen presence, of performance, which is often directly opposed to narrative integration and coherence. The 'successful' result of the attempt to reconcile these opposites, both on the level of film form and on that of marketing, are the 'classics' of the '20s: Chaplin, Keaton and Lloyd's feature films.

In addition to these classic comedians, there existed a variety of comic stars who either failed to move into feature production, or were employed and marketed in the feature film format in an unsuccessful manner (unsuccessful, that is, from a modern point of view accustomed to the balance of dramatic narrative and comic performance in the work of the 'great' comedians). Al St John, Arbuckle's partner from the early Keystone days until his move to feature production, is an example of the latter: when he was featured as the main attraction of a series of slapstick comedies in the mid-'20s¹⁰, it was still in the slapstick short format of the 'teens. Arbuckle and Normand on the other hand, the two most popular comedians of the late 'teens (rivalled only by Chaplin), starred in feature films which seem to be unable to integrate narrative and performance. Nevertheless, Normand's features ranked among the most popular films of their time, especially her first, *Mickey*, which was released by Keystone in 1918¹¹, at a time when Normand was just beginning a series of quality features for Goldwyn.

Although Normand was the first slapstick star to make the transition to feature production and thus paved the way for Lloyd, Chaplin and Keaton, her films and even her name have drifted into obscurity, and she is remembered only for her involvement in a number of scandals in the early '20s – most notably the William Desmond Taylor murder in February, 1922 – which brought her career to an abrupt end. The same could be and often has been said about Arbuckle,

Normand's early partner and first successor in the major comedians' move to feature production, whose career also ended abruptly with the Rappe scandal in September, 1920. But, in contrast to Normand, Arbuckle is beginning to be rediscovered, as evidenced in the major retrospective of his films at the Pordenone festival.

To some extent the interest in Arbuckle is grounded in traditional notions of the greatness of the classic silent comedians, the question being whether Arbuckle belonged to them or not. The rediscovery and re-evaluation of his films is very much concerned with the injustice done to him first by the courts, the industry and contemporary audiences, and later by the historians who neglected him as one of the primitives who never really transcended the Keystone formula. The retrospective of his films in Pordenone, particularly of his Paramount features and of the Al St John shorts, invited a critical re-evaluation of the variety and refinement of his performance and directorial skills. This was particularly the case with *The Iron Mule*, made, in 1924, only one year after Keaton's first classic feature *Our Hospitality*, and being a kind of remake of its opening train journey, apparently even using the same machine. Although the direction of a number of films attributed to Arbuckle is still in dispute, the discussion about his status as a director/*auteur* has been opened, to the extent of again posing the question of his direction of Keaton's *Sherlock Jr* (1924).

Russell Merritt, who presented videotaped interviews with Karl Brown (the cameraman on Arbuckle's Paramount features) and Addie McPhail (Arbuckle's third wife and stage partner)

¹⁰ Ironically these were directed by Arbuckle who wasn't allowed to perform in films after his fall from grace.

¹¹ Production of *Mickey* had begun in 1916. The completion and release of the film were delayed because of the insecurity of all parties involved as to what kind of product *Mickey* should be. Later this very fact was made the cornerstone of its publicity campaign. A contemporary advertisement reads: 'Miss Normand is essaying the greatest adventure of her surprising career. Firmly established as the Queen of Slapstick, she abdicated her throne and is now bending her talent toward comedy-drama. A daring move, but Mabel is capable of anything' (reprinted in James Robert Parish and William T Leonard, *The Funsters*, New Rochelle, New York, Arlington House, 1979, p 484).

104 concerning his life and work immediately before and in the years after the scandal, was particularly interested in the amazing changes that Arbuckle's persona and his performance, and their relation to the films' narratives, underwent when he appeared in Paramount features. Merritt accounted for this transformation with reference to the truism that mere slapstick can't sustain a ninety-minute film and therefore has to be complemented, and consequently restrained, by a strong narrative interest. He attributed the various usages of the feature format, generic narratives and modes of integrating Arbuckle's performance – as well as the extremely tight, even hectic release schedule – to Paramount's apparent insecurity as to the most profitable marketing policy for their new comedy star who, it has to be remembered, was one of the highest paid of his time. Merritt argued that, given enough time to experiment, Paramount might well have hit on a formula which would have allowed Arbuckle to develop (together with his

director James Cruze) his kind of classic comedy, thus joining the ranks of Chaplin, Keaton and Lloyd. But, of course, the Virginia Rappe scandal denied Arbuckle this opportunity.¹²

Merritt's observations on the relation between film form and marketing strategy in the case of Arbuckle's Paramount features are yet another example of the very recent renewal of interest in historical analysis which accounts for the specificity of particular genres and the output of particular production companies. Thanks to occasions like the Pordenone Festival it has become clearer that, even though they set out to overcome traditional film historiography's narrow focus on great men and masterpieces, revisionist film historians have so far had their own biases toward Biograph (for the period 1906-1913) and the dramatic features of the 'teens. After the 1987 festival it will be very problematic to generalise findings in these areas across the whole of US film production. Instead it has become necessary to analyse the peculiarities of specific bodies of films, before a more complex and comprehensive account of the development of the early North American cinema can be presented.

¹² Although he did direct two-reelers in the '20s and even starred in a series of Vitaphone shorts in the early '30s.

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LETTERS

**From Martha Rosler,
Brooklyn, New York
USA:**

Abigail Solomon-Godeau seems to be suffering. She feels that critics are at the end of a line of critical thinking – the problematisation of the photographic image – and have been made superfluous by (art) history. In fact, it is quite plain that a number of artists – not only photographers – whose work has leaned heavily on Continental theories of the image, gaining the support of certain critics, have become so successful in the art world mainstream, represented by the market, that any element of social critique in their work has been swamped. In the context of backing off from and yet recuperating her previous critical support for some now very well-established artists whose success displeases her, Solomon-Godeau tries to implicate others while letting herself off lightly. I find myself a target of her ire in her recent article ('Living with Contradictions'¹), berated for calling certain types of art practice (called 'political' by armchair politicians) 'theological' while somehow being theological myself. If she's trying to say I'm not feminist enough for her, that hardly bears a response. But perhaps she fears she is not political enough for me. She claims, against me, that the women's movement has made the political personal – as though I might have missed this.

Solomon-Godeau apparently is convinced that her own practice is political, something on the order of theoretical praxis, perhaps, but wishes to

avoid citing Althusser. Instead, she casts about for supports that simply don't make her case. She attacks a part of my article 'Notes on Quotes'²; her main problem apparently stems from my questioning of the photographic work of Sherrie Levine, a practice momentarily interesting to some critics but which Levine has abandoned for paintings beyond the critical reach of Solomon-Godeau (who nonetheless feels called upon, in one last gesture, to label them 'beautiful').

I'm sorry that 'Notes on Quotes' is unavailable to English readers, for if it were, the extent of Solomon-Godeau's misunderstanding and misrepresentation of it would be apparent. There isn't enough space here for me to reiterate its arguments, but if I were to do so it would emerge that Solomon-Godeau has come around to my conclusions, five or six years later. In that article I refer to 'a much-needed practice of critical photography and text currently in the art world . . . getting feverish attention from the sectors of the critical establishment unwilling to swim with the tide of reaction [and] concerned with a critical engagement with the images of mass culture, visual and verbal, and with those of photography (and art) as a practice', but I went on to remark that 'there are serious problems with some of it which, despite its aggressive and sometimes globalized claims, seems at time quite timid in relation to its own material. . . . For those without

¹ Abigail Solomon-Godeau, 'Living with Contradictions: Critical Practices in the Age of Supply-Side Aesthetics', *Screen Summer* 1987, vol 28 no 3, pp 2-22.

² Martha Rosler, 'Notes on Quotes', *Wedge* 3, 1982, p 72.

a pre-existent critical relation to the material, the work seems a slicked-up version of the original, a new commodity. In fact, much of this work has proved quite saleable, easy to show, easy to write about, easy to sell. . . . No one, neither critic nor viewer, has to do the hard work of understanding the social relations alluded to in the work.' The article closes as follows:

The cry of the isolated producer, the spectator of social life, represents a choice behind which lies a profound stasis. The work is immobile while critics do their work on it, 'Nature' to their 'Culture', female to their male. . . . Some of the problems with the new quotational work make sense . . . in the light of our current historical situation. . . . The critical art I have been discussing winds up traditionally modernist in its reliance (with some exceptions) on gallery and museum and critical supports. . . . Single-move art needs strong support systems. . . . If the woman artist, asserting herself (and all of us?) to be prisoner of phallogocentric language, refuses to try to speak, her refusal, coupled with her continuing to seek, through ordinary art-world channels, the validation of critics, curators, and buyers, the image of the woman as bound and impotent is confirmed. . . .

*The gutting of feminism in society makes the continuation of feminist art essential. But if women artists fit too easily into the institutional patterns of the art world, it seems plausible that feminist art will be just a competing style of the sixties and seventies and will be outdated by fashion. Repeating the images of woman bound in the frame will, like Pop, soon be seen as **confirmation** by the 'post-feminist' society. We need to find a way to maintain not just a critical but a countering practice. . . . Quite possibly it will be developed by those who have forged the critical practice I have considered here or by others much like them, as well as by men who refuse the kinds of rewards now offered by an art world more and more tied to the interests of those bent on control over society.*

Solomon-Godeau's citation of Peter Burger³ is interesting but does not go far enough: Burger points out that the 'classic' twentieth-century avant-gardes failed in their institutional critiques of the art world, which were intended to destroy the art world and merge art into everyday life. The avant-gardes she cites, furthermore, did not limit their operations to the institutions of the art world, docilely submitting their offerings to museum curators and gallery dealers for entry to

gallery 'stables'. Preposterous!

Solomon-Godeau actually goes on to acknowledge the apparent failure of disruption of postmodern photography as well, blaming it on 'problems of function, of critical complicity [whose?], and the extreme difficulty of maintaining a critical edge within the unstable spaces of internal critique'. Perhaps she ought to reread my article.

Elsewhere in her article I am chided for including part of a work called *The Bowery in Two Inadequate Descriptive Systems* in a gallery show. This show, at Light Gallery, was organised by a student of Craig Owens, who 'vouched' for her and the show's critical intentions in relaying her invitation to me. Although it was of no great moment (but amusing for a now ironic reason I explain below), I thought it might prove interesting. When I visited the show, I was disappointed. The accompanying essay contained a cautious appeal to authorities – including Solomon-Godeau – that marks student efforts. I had a mildly illuminating talk with the gallery owner over 'Photographic Values', which he felt to be lacking in 'postmodern' work. He tolerated the show; it was there, all right, but hardly with the stability Solomon-Godeau suggests.

The irony of Solomon-Godeau's attacking me for showing *The Bowery* at Light is more than personal. About ten years ago Allan Sekula, with whom I was working closely, put a work in a show arranged by a former student of his at Light. He was berated for 'loss of politics' by critics like Leland Rice, with no 'political' or oppositional credentials whatsoever. I remembered this and resigned myself to similar attacks, but I was interested in putting this work in that gallery, in a show with a nutty title.

Before the publication of Solomon-Godeau's essay, I was sent a copy of it (not by its author). It betrayed a fatal misunderstanding of *The Bowery*:

*Thus, among the postmodernist work one could also find excerpts from Martha Rosler's 1977 book project **The Bowery in Two Inadequate Descriptive Systems** (originally published by the*

³ Peter Burger, *The Theory of the Avant-Garde* (trans by Michael Shaw), Minneapolis, University of Minnesota Press, 1984.

At a museum party I explained to her that the work was conceived *precisely* for showing in galleries; after all, it was *about* a photographic practice in the gallery environment, in a particular era. Indeed, it had had a happy life in galleries from 1975 to 1980.⁴ Solomon-Godeau chose to incorporate her new knowledge parenthetically and to hit at *The Bowery* anyway (now described as 'incisive and ground-breaking') for re-appearing in a gallery, in such dirty company. She merely added the following sentence:

Although Rosler may have intended her inclusion – and its price tag – to function as a critical intervention, its presence within a postmodernist photographic bazaar effectively negated even the appearance of critique.

Yet she doesn't appear to be suggesting that all artists, but only I, stay out of the galleries, or out of shows she doesn't like. But throughout the 1980s artists' venues outside the gallery system have been dwindling – and it's all too clear (as I remarked in 'Notes on Quotes') that most critics simply don't bother to take notice of work that appears elsewhere. The championing of artists like Sherrie Levine, Cindy Sherman, Louise Lawler, Richard Prince, and others showing at the SoHo (New York) gallery Metro Pictures, or of Barbara Kruger, by Solomon-Godeau, Douglas Crimp, Craig Owens, and many other critics flows from their affiliation with a commercial gallery on the regular critical route. Did they imagine these artists put their work in there in order *not* to succeed in the mainstream art world? Still, in my own showing history of 200 exhibitions, only two or three are in commercial arenas, whereas few of the artists Solomon-Godeau has written about would care to make such a claim. But at this historical juncture, I don't particularly care about the issue of shunning or not shunning commercial spaces – or museums or television. (And why should I omit a price for my work? The price tag was something of a joke, but does Solomon-Godeau think I shouldn't sell copies of my videotapes? What of artists like Haacke, Lawler, Golub, who routinely

sell their work?) I've already gone on record as favouring – at this point – a 'mixed practice'. In any case, I find this all very odd from a critic who accepts sizeable fees from large corporations to validate their selections.

Having chastised her previously favoured photographer-artists for their complicities, Solomon-Godeau promptly picks up another canon – mostly not categorisable as photographers – namely, Asher, Buren, Broodthaers, Haacke, Lawler, Williams, claiming that their work isn't reducible to stylistics. A good bit of this work is both formalist and inconsequential outside the art world – and is, clearly, comfortable enough wholly within it, where much of it has rested these many years. (But let's leave Haacke, at least, out of this trendy list.)

I sympathise with Solomon-Godeau's lament that critics, in plying their trade, have been shown the door by gallery dealers, while the artists whose careers they have advanced – even, they may think, have *made* – don't need or want them any more, having reached success by letting the meaning of their work be inverted. But I'm hardly one of those artists. There is a certain humour in seeing a critic, fearing marginalisation by the present constitution of the art world, who wants to keep relatively marginal artists like me in our places. Critics, even if no longer influential in guiding artists' careers, still may advance by intensifying their rhetorical heat. For artists, finding a place to stand in this dealer-driven art world and media-saturated society is not so easy.

In defending me from myself, Solomon-Godeau described *The Bowery* as ground-breaking; I'd like to be shown her critical mention of this work *before* this attack. Further, I believe that her reference to it as ground-breaking is meant for my *accompanying essay*, 'In, Around, and Afterthoughts (Notes on Documentary)'⁵. Solomon-Godeau once asked me to recommend artists for a documentary show she was assembling (she didn't include my work) and said

⁴ Martha Rosler, 'The Bowery in Two Inadequate Descriptive Systems' (1974) was published in her *Three Works*, Halifax, the Press of Nova Scotia College of Art and Design, 1981.

⁵ Martha Rosler, 'In, Around, and Afterthoughts (Notes on Documentary)', *Three Works*, op cit, pp 59-86.

her entire show was based on that essay. Her show, unsurprisingly, included no citation of me or of that 'ground-breaking' work.

In fact, since I'm virtually never included in the shows that make Solomon-Godeau writhe, I can only surmise that her attack on me was motivated by the similarity of some of her conclusions about postmodernism to those I suggested in 1982, but whereas I went on to suggest a radically different kind of engagement, one that looked beyond the art world and its concerns, she wishes simply to find another art world practice to champion. In tried and true red-baiting fashion, in defending her own angle she hits at the left while offhandedly misrepresenting the positioning of Fred Lonidier, Jenny Holzer, Leeson and Dunn *et al*, whose work regularly appears in the 'art world' – while not satisfied to remain within it.

I'm interested in exploring questions of

meaning of artists' practice without necessarily condemning or abandoning them *in toto*. It's not hard to figure out that my questions about appropriative art apply to my own work as well: 'Notes on Quotes' began as a section of that essay on documentary she finds so illuminating, a section entitled, 'I cannot say, I can only repeat'. Critics are often tempted to make a big splash by reckless attack; it is the easy addiction of some to continue the charge even when the ground has been cut out from under them. It's symptomatic that much of what should be face-to-face discussion is carried out in critical journals, to the credit of someone's résumé and critical reputation, perhaps, but to the detriment of any kind of collective, let alone oppositional, practice. Solomon-Godeau also seems to suffer from the critic's impulse to play the little dictator, determining who must do what, when, where, and how – absolutely.

Abigail Solomon-Godeau replies:

Not the least distressing aspect of Martha Rosler's response to my essay is the impression it gives of my lack of support for her work – her art work and her critical writing. I have been in the past, and continue to be, a staunch supporter and admirer of Rosler and I find it baffling that she should claim that I made no mention of *The Bowery* before making what she terms an 'attack' on it. On the contrary, I wrote about the work in wholly favourable terms in my essay 'Photography After Art Photography' (in *Art After Modernism*, 1984), and *The Bowery* and/or its accompanying essay is invoked and footnoted in everything I've ever written on the subject of documentary photography (e.g., 'Who is Speaking Thus? Some Questions About Documentary Photography', 1986, 'Reconstructing Documentary: Connie Hatch's Representational Resistance', 1985, etc). Furthermore, Rosler's artwork 'She Sees in Herself a New Woman Every Day' is included in an exhibition I recently curated which is currently travelling (and I've also written about that piece in the accompanying essay). Thus, to imply as Rosler does in her letter, that my

relation to her work is characterised either by neglect or hostility is both unfair and inaccurate.

As for the other aspects of her response to my essay, I am almost at a loss as to where to begin. It does seem to me, however, that there has been a substantive misreading of both the intent and tenor of my arguments which were, after all, about *contradiction* and not about proscription, much less the making of hard and fast distinctions about what artists and critics should or should not do. I *did* take issue with part of Rosler's thesis in 'Notes on Quotes' and the inclusion of *The Bowery* in a particular exhibition with a particular agenda, but that need not have been construed as a self-righteously motivated attack. A few further points: 1) I was not suggesting that Rosler, or indeed anyone else, boycott commercial galleries. I thought I made it clear that the problem was precisely the untenability and, indeed, the undesirability of constructing inside/outside, pure/impure, correct/incorrect dichotomies. Obviously I believe that the space of the commercial art gallery can be the site of political/cultural intervention as much as any other. 2) In stringing together a group of artists I admire (in a single sentence) to make a particular point, I was hardly constructing an alternative canon to replace a

110 previous one. Surely it is possible to write in the spirit of critical advocacy or partisanship and yet not be accused of canon construction? 3) I am not 'backing off' from my critical support of the photographic work of artists such as Sherrie Levine *et al*, which like any other activity should be seen in the context of its time. Levine's practice has changed, certain of my own positions have changed, but in any case, whatever problems I may have with the work of Levine and others, it has nothing to do with their being successful. The issue is rather how work is positioned, how artists and critics position themselves, to what extent artists and critics resist or welcome recuperation and so forth. 4) Lastly, I don't understand why the accusation of 'red-baiting' is launched against me. On the

basis of what are my political allegiances so challenged? Does Rosler really believe I am attacking the left from the position of the right?

Because I do consider myself in solidarity with Rosler, both in terms of feminism and left politics, the tone of her letter is especially disturbing. It implies, in its very litany of accusation, that there is no such thing as the simultaneous existence of solidarity and criticism. It implies, in other words, that any criticism or debate can only be construed as – at best – a lack of support, and – at worst – a hostile act. Were this the case, there would be no possibility of critical questioning and debate from within the space of left culture. It was as an act of such questioning and in the interest of such debate that I wrote this essay in the first place.

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SCREEN: Reviewing the Woman's Picture

The recent publication of Christine Gledhill's anthology of key essays on melodrama, *Home Is Where The Heart Is* (British Film Institute), and Mary Ann Doane's *The Desire to Desire* (Indiana University Press), as well as a related season of events organised in 1988 by the British Film Institute, offers an opportunity to take stock of the debates which have retrieved film melodrama from critical opprobrium and reconstructed it as an object of film theory. This issue would address the adequacy of this newly 'classic' paradigm, focussing on concepts of the fetish (simulation) and the masquerade (dissimulation); cross-gender viewing and identification; the modern recycling of romantic conventions; and gay and lesbian appropriations of the genre. Final submissions are requested by May 15, 1988.

SCREEN: The Last Special Issue on 'Race'

Questions of 'race', ethnicity and cultural differences have been at the forefront of recent developments in film practices and theoretical speculation. The emergence of new black independent films in Britain; the appeal of crossover and mainstream movies inflected by an interest in 'otherness' (e.g., *My Beautiful Laundrette*) and 'minority' broadcasting, all point to important shifts and trends in contemporary cinema and television. But why has this arisen in the '80s? We are calling for papers which critically reassess historical and contemporary configurations of 'race' in film culture. In particular, we encourage concrete analyses of theories and practices which address: the aesthetics of black/Third World film; images of 'difference' in Hollywood or the Euro-American avant-garde; different positions occupied by black/white spectators and audiences; intersections of sexual and 'racial' difference and their implications for feminist and psychoanalytic perspectives; formations of productions, exhibition and reception in different national/international traditions. Called the 'last special issue' in the belief that value distinctions between 'centre' and 'margin' are becoming more difficult to sustain, we especially welcome articles which address the salience of 'race' in the cultural crisis of modernity.

Submissions are requested by June 1, 1988.

Inquiries or submissions to: the Editor, *Screen*, 29 Old Compton Street, London W1V 5PL, England.

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This conference will be concerned with exploring *popular* European cinema, to promote knowledge in this neglected area Film Studies. Contributions are invited on: popular genres, in relation to national culture and traditions, as well as to Hollywood; the industrial context of national cinemas (production, distribution, exhibition), their relation to other national cinemas; national film stars; the representation of gender and minorities; popular cinemas and their audiences; popular cinemas and their national critical reception; the relationship of popular cinemas to television.

Proposals (by July 1, 1988) and enquiries to: Richard Dyer and Ginette Vincendeau, Film Studies Department, University of Warwick, Coventry CV4 7AL, UK.

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